

MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

Vol. XIII. No. 25.
WEEKLY.

BALTIMORE, JULY 28, 1888.

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Branch Office, 108 Liberty Street, NEW YORK.

Report of the AQUEDUCT Commissioners.

(NEW CROTON AQUEDUCT, NEW YORK.)

AN ELABORATE VOLUME, CONTAINING AUTHORITATIVE TABLES BY THE CHIEF ENG., B. S. CHURCH. JUST ISSUED.

PLANT (by actual count from Table 13.)

Number of Ingersoll Drills used..... 249

Number of Drills of all other kinds used..... 103

PROGRESS (by actual figures from Table 8.)

Average weekly progress in best 10 headings that used Ingersoll Drills exclusively (omitting all idle ft. weeks)..... 38.72

Average weekly progress in best 10 headings that used other drills exclusively (omitting all idle weeks)..... 31.58

DIFFERENCE OF 30 PER CENT. IN FAVOR OF INGERSOLL DRILLS.

All headings where Ingersoll Drills were used exclusively have been completed. Send for description of Aqueduct, with Engineers' Tables of Progress and Catalogue. Sent free.

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Safe, Economical, Durable.

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V. HERRILL, 129 N. Third Street, Phila., Pa.
W. H. SMITH, Eng., 64 & 66 South Canal St., Chicago, Ill.
A. S. FISKE, Eng., 64 Johnston Building, Cincinnati, O.
A. S. FISKE, Eng., 31 Carr Exchange, Minneapolis, Minn.
T. B. PACKER, (Shelley Building), Kansas City, Mo.
JOHN S. MOORE, 100 Gravier Street, New Orleans, La.
S. C. DODGE, - - - Chattanooga, Tenn.



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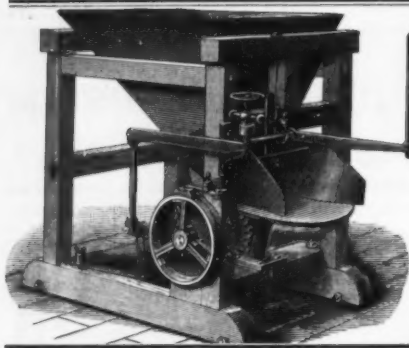
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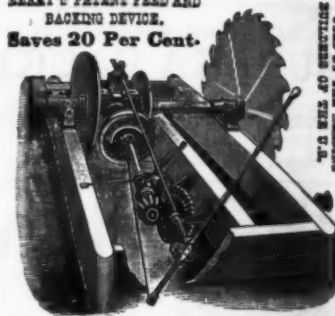
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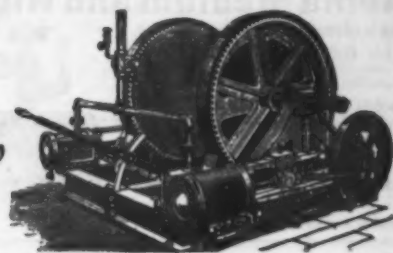
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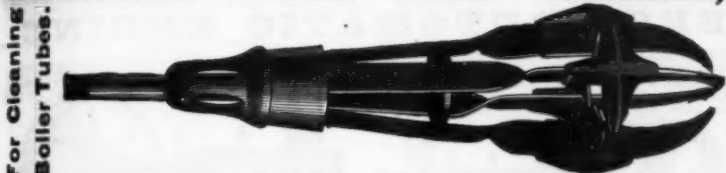
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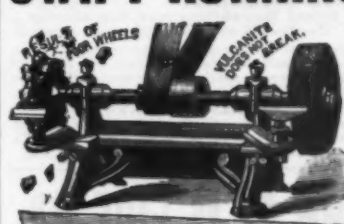


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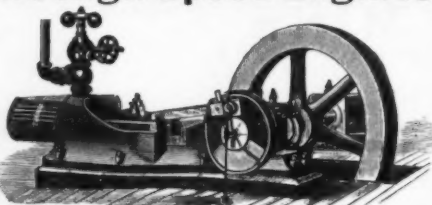
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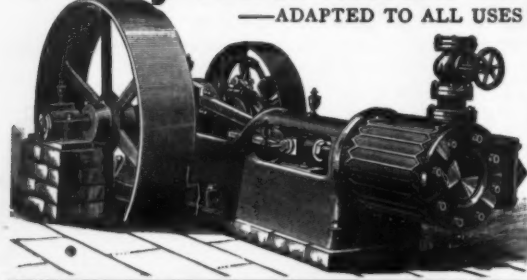
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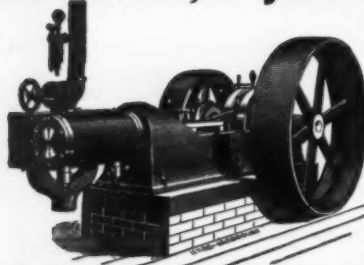
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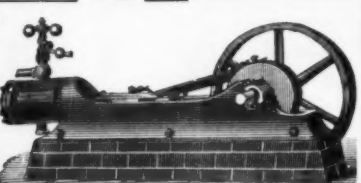
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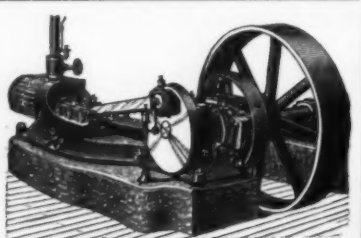
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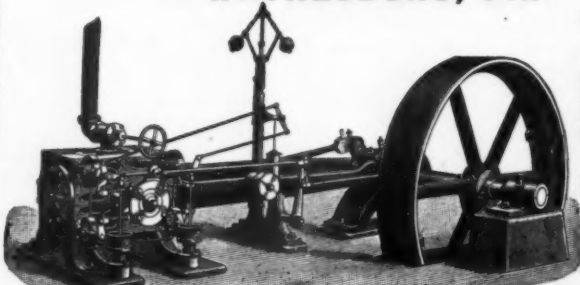
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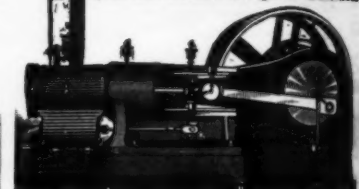
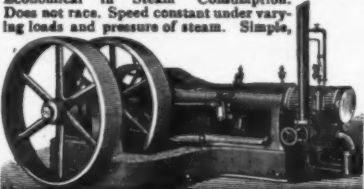


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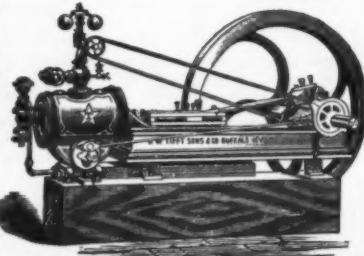
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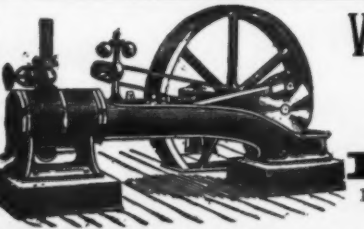
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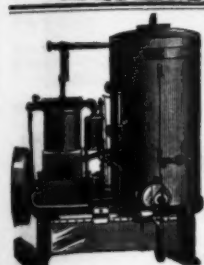
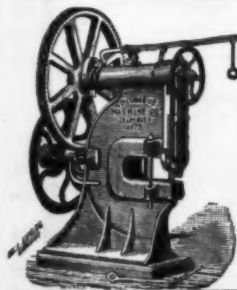
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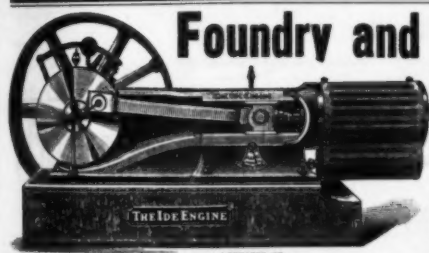
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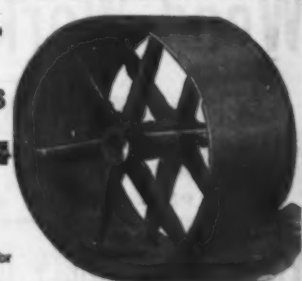
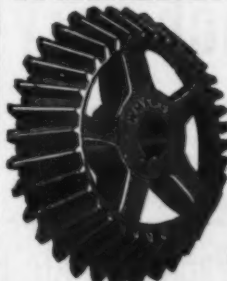
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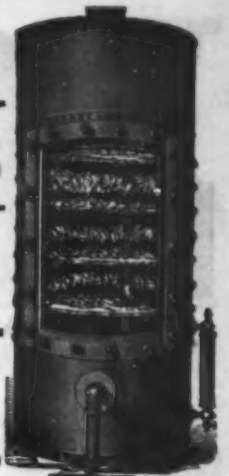
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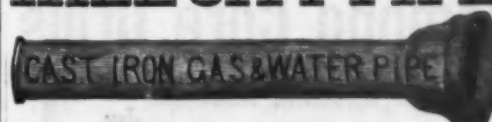
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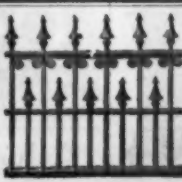
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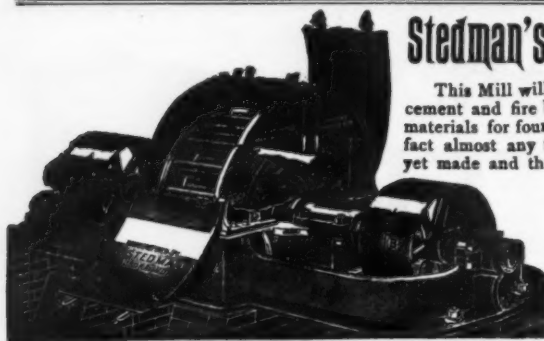
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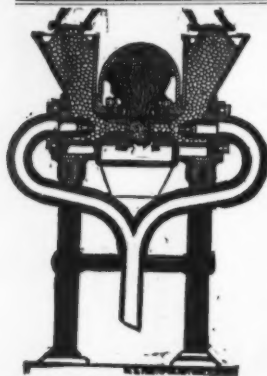


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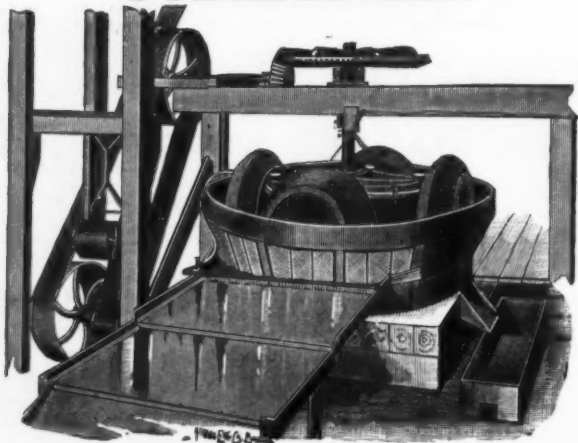
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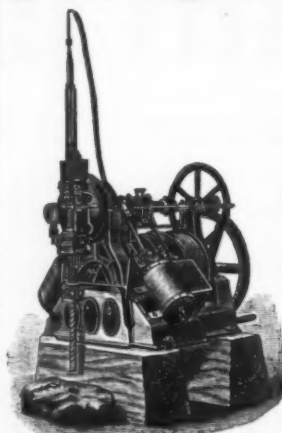
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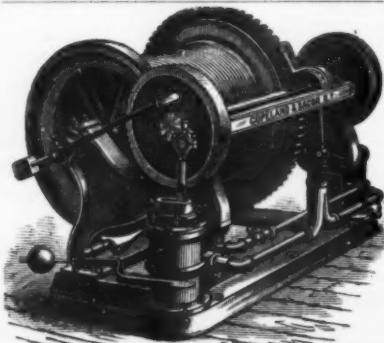
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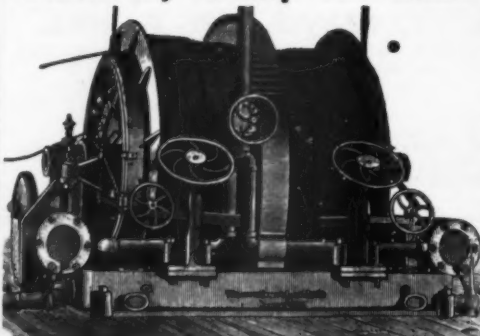
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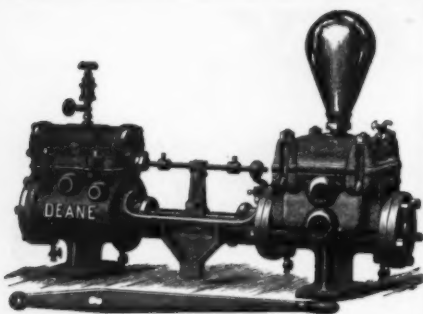
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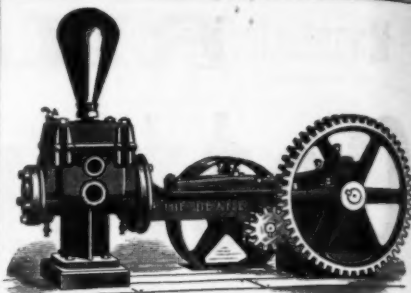
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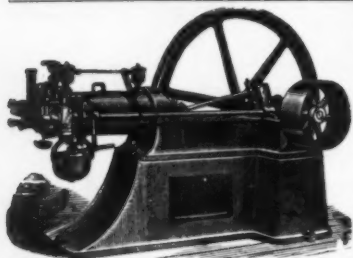
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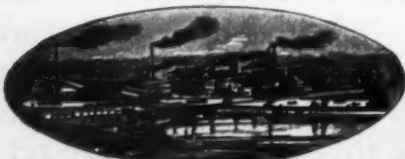
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**Cordesman, Meyer & Co., Manu-
facturers of Wood-Working
Machinery.**

CINCINNATI, O., January 11, 1888.

Editor Manufacturers' Record:

We are highly pleased with the returns from our advertisement in your journal, and take pleasure in commending it to others in our line as a valuable medium for reaching the trade. Yours very truly,
CORDESMAN, MEYER & CO.

**F. F. Waters Manufacturing Co., Manu-
facturers of Smith's Patent
Friction Drill.**

BOSTON, MASS., February 4, 1888.

Editor Manufacturers' Record:

It gives us pleasure to state that our "ad." in the MANUFACTURERS' RECORD has brought us, on the average, about 30 letters per month. We consider it a paying investment. Respectfully,
F. F. WATERS MFG. CO.

**F. F. Adams Co., Manufacturers of
Patent Household Articles.**

ERIE, PA., March 10, 1888.

Editor Manufacturers' Record:

The "ad." we have in your paper we consider one of the best investments we have made this year. We are receiving numerous enquiries from first-class houses, asking for catalogues and best cash prices. This is our second year with you, and we can trace a number of our orders direct to our "ad." in the RECORD. We have tried other papers who claim to reach the trade we are seeking, and have settled on the MANUFACTURERS' RECORD as being superior to all others for Southern trade. Yours truly,
THE F. F. ADAMS CO.

**Fletcher & Thomas, Manufacturers of
All Kinds of Brick-makers'
Supplies.**

INDIANAPOLIS, IND., April 6, 1888.

Editor Manufacturers' Record:

We are happy to say that the direct results from our advertisement in the MANUFACTURERS' RECORD have been very satisfactory. Our trade throughout the South since January 1 has more than doubled that of last year, and very largely we know this has come from the fact of your paper reaching to all quarters, and directly to those who are looking for improved machinery. Hardly a day passes that we do not receive letters saying "we see by the MANUFACTURERS' RECORD that you have improved brick machinery, etc. etc." We heartily recommend your paper as a medium for reaching the people. Yours very truly,
FLETCHER & THOMAS.

**Garcin, Moseley & Böhmer, Sales
Agents Southern Rubber Co.**

RICHMOND, VA., April 26, 1888.

Editor Manufacturers' Record:

We desire to write you our opinion as to how we regard the MANUFACTURERS' RECORD as a reliable source of information and as an advertiser. We are pleased to say we have found it to be by far the most reliable paper of the kind published, and, as we have subscribed to all kindred papers, we think we are in a position to judge. We have discontinued all subscriptions to papers purporting to be of the same class, as we find all the information regarding the erection of new enterprises in the MANUFACTURERS' RECORD about one week ahead of any of the other journals. Through your Construction Department we have secured some of the largest orders placed in the South for rubber and leather belting, among them that of the Empire Lumber Co., at Empire, Ga., to whom we furnished some \$2,000 worth of belting; the Orange Park Lumber Co., at Orange Park, Fla.; the Brenham Oil Works, Brenham, Texas, and many others too numerous to mention. We cheerfully give you an advertisement, and feel assured that the money is well spent. We will say we do not believe in newspaper advertising, and your paper is the only one in which we would care to have an advertisement of any kind. We have been subscribers to the MANUFACTURERS' RECORD for three or four years, and intend to keep our subscription as long as the paper is published. Very truly,
GARCIN, MOSELEY & BÖHMER.

The City of Louisville.

Louisville is one of the best examples which can be given of the rapid growth during late years of the older cities of the South. As so often stated in the MANUFACTURERS' RECORD the industrial progress of the South is not confined to the new towns, but extends throughout all that section, and many of the older cities, such as Louisville, are growing at a most astonishing rate. This is strikingly brought out in the fact that the population of Louisville, which in 1880 was 123,000, now numbers 200,000, while the value of the manufactured products of the city has increased from \$35,908,000 in 1880 to about \$70,000,000 to \$75,000,000 for 1887, with an increase of over 17,000 in the number of hands employed. In general trade as well as in manufactures the development has been rapid, the bank clearings, always one of the best tests of a city's prosperity, being nearly \$100,000,000 a year greater now than but four or five years ago, the increase during the last two years having been so marked as to command wide attention in financial circles all over the country.

The future of this city is very bright, and, as from it are emanating the influences which are fast awakening the whole State to a new era of progress and prosperity, it is here that the greatest development will be made. The vast mineral and timber resources of this State great almost beyond comprehension, which are now attracting so much attention, will be tributary to Louisville. Rail roads are stretching out to open up these resources, and from Louisville are radiating in all directions lines which will pour the wealth of almost unlimited forests of hardwood, and of millions of acres of the very best steam and coking coal, and of iron ore of every quality into this city. Louisville holds the key which unlocks the riches of a State far surpassing in natural resources of soil, minerals and climate, Pennsylvania itself, and while the whole State must necessarily enjoy to the fullest extent the great prosperity which the development of its iron and coal and timber interests must inevitably bring, Louisville will reap larger gains than any other one city, and this makes it certain that it will become one of the few really great cities of this country.

The whole South is to be congratulated upon this, for as Louisville increases in prosperity, its influence for the development of the South will increase. It is already a city of great wealth, possessing an immense mercantile and manufacturing business, abundant railroad facilities, water transportation over the vast section of country tributary to the Ohio and Mississippi rivers and all their branches, and advantages for many lines of manufactures rarely equaled, and added to all this, its business men, under the energetic lead of the

Board of Trade Committee on Industrial and Commercial Improvement and the Commercial Club, are pushing forward, determined that, if possible, Kentucky shall lead the entire South in the march of industrial progress.

Misrepresenting the South.

In the North we want well-paid labor and prosperous stores and factories. In the South they care little for stores and factories, and much for cheap labor wherewith to produce raw cotton.—Chicago Inter-Ocean.

Is it necessary for the Inter-Ocean and other papers to slander the South to help their cause? There is not a paper of any standing in this country whose editor does not know that the South is to-day giving more attention to developing manufactures than any other part of the country. There is scarcely a town or even a village from Maryland to Texas which is not giving some attention to industrial matters. The people of the South, in fact, are desperately in earnest and hard at work building new enterprises. If the Inter Ocean does not believe this, let it read in this issue what Anniston has done in that line, and remember that Anniston is but one of hundreds of towns and cities in the South where the whole energy of the people is bent upon manufactures. Let it study the growth of Roanoke, of Birmingham, Chattanooga, Sheffield, Decatur, Florence, Gadsden, Rome, Bessemer, Athens, Atlanta, Fort Worth, Dallas, Augusta, Columbus, and hundreds of other places, large and small, old and new, where factories are the subject of most absorbing interest, and where millions of dollars of Southern money are being invested by Southern men in furnaces, foundries, shops, mills, mines, and every other industrial enterprise almost that can be named.

SOME of our exchanges seem to be under the impression that the value of the agricultural products of this country largely exceeds the value of manufactured products, and one of them, referring to the value of cotton, wheat, etc., says:

The figures swell up to proportions that are simply amazing and that throw the computations for other industries completely in the background. It is only when studying the yield of farm products that we can begin to realize what a really great country we live in.

Our esteemed contemporary probably forgot that the total value of all agricultural products, including those sold and those consumed on the farm, for 1880 was \$2,212,540,000, while the value of the manufactured products for the same time was \$5,369,579,000, or considerably more than twice as much.

AN attractive pamphlet has been issued setting forth the advantages of Gainesville, Ga. The facts which it gives as to the resources, the business interests and the healthfulness of that place are very interesting.

Shade Trees in Cities.

One of the greatest beautifiers of a city is an abundance of well-arranged and well-cared-for shade trees. They give to any place an air of comfort and pleasure which invariably attracts the attention and commands the admiration of every visitor. In contrast with cities where great attention has been given to providing shade trees, a place which lacks trees has a dreary, dismal look, and on a hot summer day its streets are extremely uninviting to pedestrians. The builders of new towns in the South would find that they could do no wiser thing, after arranging for sewerage, which is of the first importance, than to plant trees on every street—those intended for business as well as those for residence purposes. Some of these towns have one or two streets thus shaded, but they have failed to do the work thoroughly and systematically for the whole town. There is not a growing town in the South which could not well afford to employ a competent man to devote his entire time to this business and to spend from \$3,000 to \$5,000 a year in this way. That sum would probably be sufficient in towns of moderate size to have every street lined with trees and good care taken of them until they were well grown. While beautifying the city, the trees would also greatly add to the comfort, the pleasure and the health of its inhabitants. The cost would be returned many fold in this way, but if this were not enough inducement, the direct financial returns through attracting new inhabitants would surely many times repay the amount expended. Advertising is essential to a town as well as to a business man, but advertising will accomplish no good if, when visitors come, they find an unattractive, undesirable place, lacking everything essential to comfort and pleasure. It is the beauty of well-shaded, well-paved streets which often induces people to locate in a town. In discussing this subject the Memphis Appeal says:

Peter Henderson, in an article in the current number of Harper's Monthly entitled "The Street Trees of Washington," is enthusiastic over the asphalted and shaded streets of the nation's metropolis. The asphalt, the cheapest pavement, the most durable, the cleanest and least noisy yet devised, is a sanitary pavement of the highest order. There are no exhalations possible from it, and swept every night by the street-sweeping machines, the streets of Washington are the cleanest in the world. There are nearly 130 miles of such, all shaded from the summer's intense heat by 40 different varieties of trees, the most useful of which is the Carolina poplar, which, on account of the moisture it takes up, is called the American Eucalyptus. There are 16 miles of these planted, 55 miles of white poplar, 10 miles of ash-leaved maples, 6 miles of Norway maples, and 33 miles of 10,000 trees of 37 kinds, the total number being 63,014. All these trees were raised in a special nursery and each one planted with special care and all since 1873, the result being that many of the streets are now over-arched, protecting the roadway as well as the sidewalk from the rays of the sun, thus greatly modifying the climate for the inhabitants. The care of these trees and the yearly additions cost less than \$20,000 a year, a mere trifle when it is considered that it may save millions in conducting, as it does, so much to the health of the city. In planting, the greatest care is exercised to prevent the roots from drying or freezing;

the soil is packed closely around them and one copious watering given, and they are afterwards as carefully tended for two years as a crop of potatoes or corn would be, the soil being stirred by a pronged hoe for four or five feet from the stem. Washington is thus a city in the midst of a forest, which has materially checked and lessened the effect of the malaria that for a long time was its bane and curse. If the government of the taxing district of Shelby county would in its next budget make an appropriation of \$10,000 for each year, send to Washington and employ a forester, a man who knows all about all sorts of trees, their life, their ailments, their aliment and their cure and care, the people would feel encouraged to plant trees on all the residence streets, and Memphis would soon be, so far as shade could make it, as handsome and delightful a city as Washington. Such a man could take care of Court, Market and Auction Squares, and would soon restore vitality to the trees that in the former have been so horribly butchered by ignorance and incapacity. Trees grow well and rapidly in this soil and climate, and every one of our outlying streets should be shaded by them. The work of planting once begun, it would be taken up by the schools, and we should have an arbor day, making its indelible impression upon the rising generation of love for and the tender care of trees.

THE Bridesburg Manufacturing Co., of Philadelphia, one of the largest builders of cotton mill machinery, employing when in full operation upwards of 500 or 600 men, have been invited to remove their works South. To secure the removal of such a large plant as this, though, very heavy inducements would have to be made. It is somewhat surprising that, in view of the rapid growth of Southern textile interests and the certainty of this business becoming one of the leading industries of that section, no one has yet established large works in this section to build cotton and woolen mill machinery. The first large enterprise of that kind started in the South will doubtless easily develop a big business.

A NEW YORK company is now making railroad freight cars of iron, for which many advantages are claimed. It is said that they are lighter than wooden cars, and yet have a capacity of 60,000 to 100,000 pounds of freight. The cost of repairs is claimed to be very light, and when they have worn out the material can still be sold for scrap iron. This opens up the possibility of a new industry for the South. With cheap iron of the best quality at hand, the South could no doubt make iron cars at a lower cost than any other place in the country.

OUR Anniston letter gives the particulars of some gigantic furnace projects which are taking shape at Bessemer. That wonderful town is getting ready, according to report, to build 5 more furnaces and a number of other enterprises. We congratulate the men who have the foresight and wisdom to commence building furnaces now while trade is dull, that they may be ready to blow in by the time active times and high prices come again. This is the correct policy.

If you wish to keep posted on the progress of the South, read the MANUFACTURERS' RECORD. Price \$4.00 a year.

Wonderful Industrial Development.

One of the most remarkable exhibits ever made of the industrial growth of the South as illustrated in the history of one town was given in the Anniston Hot Blast of July 17, showing that this one town now has more capital invested in its industrial interests than the whole State of Alabama had in manufactures in 1880. The facts presented in that paper are well worthy of thoughtful consideration, for they teach a lesson fraught with tremendous import of world wide interest. They picture as nothing else could more forcibly do the stupendous industrial growth of the South, which is now revolutionizing the business interests not only of that section, but of other sections. Such statistics as these are of vital importance to business men everywhere. They tell of what the South has already accomplished and of the remarkable financial soundness of this growth, and make it possible to gain some conception of the wonderful era of progress and prosperity upon which that region has entered, and of the influence which it must have upon the business interests of the whole country.

The people of the whole South may well rejoice at such a showing as this, for it demonstrates what can be done in their favored land, and it should stimulate them to renewed efforts to build up their country. Anniston has made this wonderful growth through the power of the determined, untiring energy and enterprise of her own people. Her record should be widely published, that others may be aroused to renewed efforts to build up their country, and then from Virginia to Texas we will see towns vying with each other in friendly rivalry, each striving to do better even than Anniston has done.

The people of the North may well study the facts given in this article, for they tell of what Southern energy and enterprise and Southern money can accomplish. They most emphatically refute the slanders that have been heaped upon the South by those who talk about Southern sloth and who believe that the South lacks energy. The South is waging a friendly warfare for industrial supremacy, and Anniston is but one of the advance guard of the mighty army of towns and cities which are coming forward to dispute with New England—and Old England, too—and the Middle States for the control of the iron, the textile, the wood-working and kindred industries. A revolution is already in progress.

Referring to this development in Alabama, a writer in the Iron Trade Review, of Cleveland, Ohio, after a close personal investigation, paid the following well-deserved compliment to Southern enterprise:

Words will not come to express in fitting terms the magnificent audacity of the Southern men who have built up this portion of the New South. In older districts in the

North capital would have shrunk from the ventures encountered here on every side, but these men not only believe in their district, but they firmly believe in themselves, and the union of these beliefs has proved a lever that has lightly tossed aside difficulties that have elsewhere proved insurmountable.

It is surprising that in many Southern towns of upwards of 10,000 inhabitants there is no public market. In these towns the people must depend upon country wagons and the grocery stores for their provisions and vegetables. Besides adding greatly to the convenience and comfort of all housekeepers, a public market encourages the trucking business. If the farmers adjacent to a town have a central point as a market-house to which they can carry their produce and find buyers, many will go into the raising of fruits and vegetables who will not do so where they have to cart them all over town and peddle them out from door to door. If the people of any town want to encourage the trucking business in their neighborhood and wish to secure good market supplies at reasonable prices, they must build a good public market-house. Decatur Ala., has wisely decided to do this, and for that purpose has raised about \$12,000. In this she has set a good example. Let others follow.

THE arrangements for the Augusta National Exposition are being vigorously pushed, and the outlook promises a grand success. Under the influence of this enterprise Augusta is showing great energy, and while determined to make the exposition the biggest thing of the year in that line, her people are giving much attention to the establishment of new industries. The exposition, even before the buildings have been finished, has returned to Augusta many times its cost in the wide advertisement given the city.

THE Cedartown (Ga.) Standard has issued a special edition giving many facts of interest regarding the advantages of that place. The information which it gives as to the mineral interests of the county are especially valuable.

Advertising.

People who think that an advertisement of three months' standing is going to make them rich make a mistake. Advertising is like eating. If you want to be healthy you must eat regularly, as meat to-day will not serve you for to-morrow. To be well and heartily, eat at every mealtime—to be prosperous in business, advertise regularly. Stop the one, and you starve and die. Stop the other, and your business takes consumption and dies also. Spasmodic advertising is like having a "feast and a famine"—more famine than feast as a rule—and is never satisfactory.

To take out your card in dull times is like killing your horse because he is a little lame. It is in dull times the most advertising should be done, and it is in dull times that advertising is the most effective, as more notice is taken of printers' ink then than at any other time.—Builder and Wood Worker.

A Good Word for Tallapoosa.

Just across the Tallapoosa river, in the State of Georgia, is a town bearing the same name as the boundary river. The MANUFACTURERS' RECORD has heard of it time and again. It has now and then published in its "Construction Department" items appropriate to the columns that department occupies of the new enterprises started there. It has also refused to accept the advertisements sent it by the promoters of that Georgia border town, because there was seemingly an insincerity about them that conveyed to the critical reader the idea that Tallapoosa was an antitype of those numerous Western places which speculators have long been accustomed to exploit, to the filling of their own purses, while thousands were victimized. The MANUFACTURERS' RECORD has never yet lent its support knowingly to anything that savored of fraud. It has not hesitated to speak its mind freely against any and every Southern scheme that lacked an honest foundation. It has held to the belief that "honesty was the best policy," not only for individuals, but for the South also, and that any deceptive statements admitted to its columns about any Southern locality would hurt all the interests of that rapidly developing part of the United States, and would also impair the high confidence this journal has enjoyed from the beginning of its career.

In this issue we reprint a letter recently published in the New York Commercial Advertiser about Tallapoosa. That admirable and able paper, established in 1797, has always been noted for its conservatism and its integrity. For several years it has sent to the South a trusted correspondent to note the great industrial movements in progress, and to report what he saw without fear or favor. His letters have had a wide circulation, and their fairness has been universally approved, even by those who felt that their own schemes had been somewhat damaged by his frankness. During the past two months that correspondent has made a trip through portions of Georgia, Alabama and Tennessee, and the Commercial Advertiser is making his letters public. In the one from Tallapoosa we reprint this week may be seen the following paragraph:

The style of the florid advertisements put out was altogether too much like that employed by certain Florida companies (since exposed) for the deception of the credulous. They cast a shade of doubt upon the merits of the place and the honesty of its promoters. There are those who expect to find the fabled crock of gold at the base of the rainbow, but they are exceptions to the rule among American citizens. Moreover, one great metropolitan journal (it had received no advertising from the company) sent a correspondent here to discover the fraud and denounce it. He did the last without finding the first, but the latter I did not know until I came here and saw for myself. There is no fraud or humbug about Tallapoosa, nor has there been any intention in that direction among those who have industriously "boomed" it. On the contrary, is their anxiety to tell all their hopes and ex-

pectations for their favorite, and at the same time to guard against overstatements, they have inadvertently given to their advertisements the peculiar ambiguities that discredited them and it. This may seem an anomaly, but it is the truth.

We quote this pregnant paragraph entire because it explains lucidly what has puzzled many others besides the MANUFACTURERS' RECORD, and because we desire to give just credit to every thoroughly honest enterprise started in the South. We knew that Tallapoosa was building up rapidly—one needs only to pass through the place on the cars to see that—but its style of advertising had led us to fear that it was building on a fictitious foundation, and hence our refusal at different times to accept its advertisements. Knowing the Commercial Advertiser's correspondent personally, and knowing that for many years he has made a careful study of the growth of new towns in the West and South, we republish his letter on Tallapoosa that the views of a careful observer who has investigated the place and its advantages may be known. We commend this letter to the attention of our readers.

Developing Coal Mines.

KENNESAW, KY., July 11, 1888.

Editor Manufacturers' Record:

The four Jellico coal mines in this vicinity are to be consolidated. When this event takes place in a few weeks there is no doubt but that our company, the Main Jellico Mt. Coal Co., will build 100 or more coke ovens, because having found that we can coke our slack coal with success, and that it makes a first-class quality of coke. There will also be several other developments to take place on the property of this company, as well as the property of the other companies, which will comprise the new company. We have during the past spring made over \$40,000 worth of improvements on this property, and have built 33 new houses since February, and have bought a shingle machine, capable of sawing 25,000 shingles per day. We have an engine ready with which to furnish motive power for generating electricity to run a system of cars in our mine without mules, and contemplate inaugurating this system in time for the winter business. In all probability we will open another mine on our property, having already made a contract with the Louisville & Nashville Railroad Co. to build a "Y" at our switch, which will afford us increased facilities for the shipment of coal. We intend to commence manufacturing fire-clay brick from our superior vein of fire-clay, and have been in correspondence with parties about a fire-clay brick machine.

M. E. THORNTON.

Mr. EDWARD C. PECHIN, M. E., of Cleveland, O., writes to the editor of the MANUFACTURERS' RECORD as follows: "I want to express to you the pleasure and satisfaction I derive in going over your paper, which I see at the office of the Iron Trade Review. It is clean, newsy and progressive, and its editorials are breezy and always interesting, representing a new era and practically a new country. I wish you the largest possible success."

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

NOTES OF PROGRESS.

What Alabama Is Doing.

BRANCH OFFICE MANUFACTURERS' RECORD,
ANNISTON, ALA., July 23, 1888.

Anniston rarely lets a week pass by without adding at least one new and important industry, and judged by the rate she is moving along now, the coming fall will see such a period of activity as but few cities have ever known. The latest new enterprise is a \$25,000 gold smelting plant, for which the site has been secured.

During the last few months gold mining has attracted considerable attention all through this section. In giving some particulars of the mining operations now in progress, the Tribune, of Rome, Ga., says:

"Beginning in the neighborhood of Talladega, we learn that Mr. Sullivan, of the May Virginia mines, has some ten mills just ready to begin crushing the rich gold ore of that section, and that great excitement exists all along the gold-bearing districts, and options are being sought on all the lands supposed to carry gold.

"A little further east, at Arbacoochee, a strong syndicate of Birmingham men have leased a valuable property with a view to testing and prospecting it. Should it prove satisfactory, they will then purchase and go at once to work. Within a few miles of Arbacoochee is the justly celebrated Gold Ridge property, which, under recent prospecting, shows up richer than ever, and is destined to make some man or men millionaires.

"Just south of Tallapoosa, the famous Holland mine is being worked by a strong company headed by Major Burke, of New Orleans. This company has put in a \$100,000 plant, and has been running it day and night for more than forty days, and reports say they are making 'big money.'

"They are so jealous of their property that they have enclosed the mine where it is being worked, keep a guard at the gate and allow only a favored few to enter.

"This belt continues through North Georgia. In the meantime new gold mills are being erected, and the outlook for profitable gold mining was never more promising. A strong company from Philadelphia has just completed the erection of a costly mill on Long Branch, in Hall county. It is their purpose to do deep mining.

"The indomitable Hand Gold Mining Co. have just finished building another 20-stamp mill, thus adding another feature to their already extensive plant. There are now over 150 stamps constantly at work in Hall county, with chances of being doubled before the year is out. Small mining has enjoyed quite a boom this season. Everybody is making wages, and in a great many instances these small miners make \$5 and more a day."

The Southern Smelting, Reducing & Mining Co., with a view to building large works for treating these ores, after much investigation, decided to locate their smelting and reducing works at Anniston. These works will cost \$25,000, their daily capacity being 20 tons, but they will be so arranged as to admit of a increase to 50 tons.

Messrs. Comer & Trapp will have their new grist mill in operation in about two weeks. The machinery for it cost about \$10,000, the motive power being a 50 horsepower Buckeye engine. This is an enterprise which Anniston has much needed. It will grind corn, wheat, cotton-seed, &c., for human food as well as for animal feed. The daily capacity will be 1,000 bushels.

Building operations are brisk, but the demand for dwellings continues largely in excess of the supply. Capitalists can find most excellent opportunities for investment in building houses for sale or rent. Real estate here is cheaper now than it will ever be again, and now is a most advantageous time for such investments, because the rapid

growth of the city will inevitably cause an advance in values before very long.

Cotton mills seem to be the order of the day, but Alabama lets Georgia lead her in this line. A company has been organized to build a mill at Dallas, Ga.; the machinery has been ordered, and the mill will probably be in operation by late fall. At Augusta Messrs. Young & Hack, of the Richmond Cotton Factory, have commenced work on another mill which they will push forward as rapidly as possible. It is very strange that the people of Alabama have failed to give much attention to this industry. The mills in this State, including the very large one at Anniston, are making money, and there is room for many others. If Alabama would add to her great iron interests a large cotton manufacturing business she would soon become an exceedingly rich State. Georgia and the Carolinas are moving rapidly in this direction.

Rome, Ga., is one of the liveliest towns in this section. While picking up new enterprises rapidly enough to assure its becoming a very important industrial center, it is just now giving the largest share of attention to the preparations for holding the North Georgia & Alabama Exposition. The indications are very favorable for a fine success.

Mr. P. P. Johnson, of Red Oak, Iowa, has purchased J. W. Walker's plantation of 4,700 acres in Macon county for \$50,000. The purchaser will turn the plantation into a grass and stock farm, and expects to cut it up into 160-acre farms and sell to Western people, thousands of whom he says will move to Alabama this fall and winter.

Work on the Atalla Furnace, at Atalla, the point where the Anniston & Cincinnati Railroad strikes the Queen & Crescent system, is progressing.

On last Tuesday the Hot Blast published a list of all the industrial enterprises in Anniston, with the amount of capital invested in each, showing a total of \$10,000,000 against \$9,668,000 as the amount invested in manufactures in the whole State of Alabama in 1880. This is a remarkable exhibit, and demonstrates what the South is doing in building up its industrial interests. What a revelation the census reports of 1890 will make when compared with the reports of 1880.

It is understood that Messrs. W. A. & J. F. Crutchfield and J. D. Hough, all of Macon, Ga., will build a new cotton mill at that place.

Mr. Evan P. Jones, who is working up a company to build a large rolling mill in Anniston, is said to be meeting with good success. This is an enterprise which would prove very profitable here.

News comes from Bessemer which is calculated to have a wonderful effect upon that town if it should prove true, and of that there seems to be no doubt. It is no less than the building of two more great coke furnaces, with the probability of two additional coke furnaces and one charcoal furnace also being erected. The Bessemer in its last issue announces that ground has been broken for the first two, and orders given for the immediate erection of one hundred houses for the workmen. The money, it is said, has been raised mainly in Charleston and Savannah. These two furnaces are distinct from two furnaces (a duplicate of the present plant) to be erected by the De Bardeleben Coal & Iron Co., of which the Bessemer says "we learn that work on these will commence within a short period."

A charcoal furnace company is being organized, and nearly the necessary amount of stock has already been subscribed. In addition to these great enterprises the fire brick works previously mentioned will now be established, orders having been received for 3,000,000 bricks for these new furnaces, besides outside orders. Bessemer truly seems to be getting ready for active work, and if these enterprises are promptly started the other industrial centers of Alabama will find that it is going to be a rival for first place.

JACKSONVILLE, ALABAMA.

A Prosperous Town in a Prosperous County.

Calhoun County and Its Many Attractions.

[Special correspondence MANUFACTURERS' RECORD.]

JACKSONVILLE, ALA., July 20, 1888.

In Calhoun county, ten miles from Anniston, is Jacksonville, the county seat. This is noted far and wide as being one of the richest mineral counties in this wonderfully rich mineral State of Alabama. In it are found the vast beds of fine ores which have enabled Anniston's furnaces to produce what is claimed to be the best iron made in the South, forests of splendid timber, farming lands that have made this section noted, a climate almost unequalled elsewhere in the whole South, and many other advantages that combine to make Calhoun county one of the most favored spots which man has ever yet discovered. No one can study the resources and attractions of this section without growing enthusiastic over its brilliant future. This whole county is destined to be dotted with furnaces and factories, and the villages of to day will ere many years shall have passed become large centers of industrial activity, while the farmers will reap new and larger profits through the development of diversified production made necessary to supply the steadily increasing demand from the manufacturing towns for fruits and vegetables, eggs, poultry, milk and butter.

In this favored county, located in one of its most beautiful spots, is Jacksonville. The town is beautifully situated at the foot of towering mountains. It is itself on an eminence overlooking one of the loveliest valleys the eye of man ever rested upon. The elevation and the undulating character of the site secure for the town perfect natural drainage. Surrounding it are the fertile Alexandria and Tallashatchee valleys. It has a population of about 2,000. Jacksonville is a delightful place in which to live. The shade trees, the profusion of foliage, the luxuriant plant growth, the flower and vegetable gardens, make it wonderfully inviting and restful and refreshing through the summer season. Few towns of its size can boast of so great social attractions. The church and school facilities are exceptionally good. Every dwelling is surrounded by ample grounds, shaded in most cases by stately oaks. There are some splendid residences, fine old mansions, in the midst of extensive and well kept grounds. One of the most attractive of these homes is that of Gen. J. W. Burke, whose settlement in Jacksonville involves quite a romantic story. Gen. Burke was an officer in the Federal army, and was in command of troops that passed through this section during the war. Riding one day to the summit of a hill just outside of the village, as it was then, he was struck with the remarkable beauty of the surrounding country as seen from that point, and declared that if he lived to see the end of the war he would come to Jacksonville to live. And, true enough, when the war had ended, he returned, purchased the hill from which he had looked out over the fertile valleys, and built a house, in which he now lives. His home is one of the finest in the South, and its owner is one of the most admired and loved of Jacksonville's citizens.

The town has a system of public water works, the water being conveyed through a pipe by natural pressure from a mountain spring two miles distant to a reservoir on the top of a hill within the town. In the heart of the city, gushing from the foot of a high hill, is a large spring of clear, pure, cold water. The capacity of this spring has been ascertained by expert measurement to be over 3,000,000 gallons a day. Jacksonville is widely noted for its healthfulness, and many persons come here every year

from neighboring States to spend the summer.

In addition to its beauty of location, its charming scenery, its healthfulness, its perfect climate, its pure water, its splendid homes, its elegant society, its churches and schools, it has other claims to attention. Its mineral resources and industrial possibilities can scarcely be surpassed anywhere in the South. There are whole mountains of iron ore. Huge boulders of ore that will analyze over 50 per cent. of metallic iron project above the surface. The soil in places is nothing but iron ore. A hundred furnaces might draw their supplies of ore from these hills for a hundred years. The ore is brown hematite, though the red fossiliferous ore is also found here in great abundance. Manganese ores exist in inexhaustible quantities. Two specimens analyzed show respectively 51.087 and 53.217 per cent. of pure manganese, with .00157 and .00177 per cent. of phosphorus. Ochre, suitable for the manufacture of paints, can be had in unlimited quantities and at slight cost for mining. Kaolin and marble are both found in large quantities, and also limestone and sandstone suitable for building.

The Jacksonville Mining & Manufacturing Co. owns some 2,000 acres of residence and business property in Jacksonville, and about 10,000 acres of ore lands that have been carefully picked.

This company is doing a great deal to develop the town. It binds itself to devote 50 per cent. of the proceeds of the sales of land at this public sale to the establishment of manufacturing enterprises and to improvements. It agrees also not to declare or pay any dividend on its capital stock until it has invested not less than \$150,000 in manufacturing enterprises and improvements calculated to enhance the value of the property. And it agrees that in case the purchaser of any lot or lots shall expend in buildings or other improvements within twelve months after the purchase three times as much as the total price, it will remit one-third of the price of the lot.

A fine hotel has been built and was opened this week. It is intended both as a business hotel and as a summer resort, and has been handsomely furnished by the Robert Mitchell Furniture Co., of Cincinnati. The company has set apart a tract of 110 acres within a mile and a-half of the center of the city for a park; and a magnificent park it will make. It is covered with splendid groves of lofty oaks and thickets of pine and cedars, and has little undergrowth to be removed. In the center of it and nearly surrounded by hills is a low place filled with springs. This will be converted into a lake with an area of 15 acres. Drives will be constructed, and it will be made a most inviting place of resort. Ten thousand dollars will be spent in laying it out and beautifying it, making the lake, etc. The officers of Mining & Manufacturing Co. are: Gen. J. W. Burke, president; Capt. James Crook, vice-president; P. D. Ross, treasurer, and J. A. Gaboury, general manager. Under the shrewd and able management of Mr. Gaboury, a man of original ideas, possessing great zeal and untiring energy this company will most certainly become a great success.

Among the progressive men of the town is Hon. L. W. Grant, a public-spirited, liberal, enterprising citizen, to whose broad views, liberal policies and persistent labors Jacksonville and Calhoun county owe a great deal, and whose ably-edited paper, the Republican, one of the best weeklies in the South, is doing untold good for the town in which it is published. H.

READ what the Baltimore MANUFACTURERS' RECORD has to say of the Magic City. The South never had a better friend than the MANUFACTURERS' RECORD. First, because it never exaggerates, and second, because it has for ten years labored zealously to fairly and honestly bring her wonderful resources before the world.—Roanoke (Va.) Times.

Tallapoosa's Boom.

A Thriving "Yankee Town" Down South.

Beautiful for Situation, and Rich in Natural Advantages.

[Special correspondence of the New York Commercial Advertiser.]

TALLAPOOSA, GA., June 25, 1888.

The map of the Georgia Pacific Railroad will show to all interested persons the location of this embryo city. No other map will do it, for until last year this was an insignificant village on the eastern bank of the river for which it is named. Yet in the past, before white men forced the Indians to retire to their interior fastnesses, this was a famous resort for the Cherokees, who lorded it over all this fair region. Under a group of immense trees, of which nothing but the stumps remain, their chiefs and warriors met in council for generations, and determined what should be the policy of their nation on all questions between them and the surrounding tribes. Here also they came to drink the waters of various medicinal springs that to their "untutored minds" were so many Bethesdas, though they had no legend of an angel coming at times to trouble the waters and impart healing virtues to them. It is a curious thing, and well worthy the study of those who delight in such investigations, that not only the Georgia Pacific, but quite a number of other railroads in the South follow with almost no variation the trails made in past centuries by Southern Indians. The science of the civil engineer has verified the skill of nature's children by adopting the routes they traversed in the long ago.

Across the river is Alabama, the beautiful land of rest, from the aboriginal standpoint, but in these days so teeming with human activities that the old chief who gave it its name, if permitted to return from the happy hunting grounds for a brief visit to the land he loved, would probably declare that its charm had departed. Here I find a population of several thousand people, more than two hundred new residences finished and occupied, quite as many more in process of construction and many more under contract, whose impatient, would-be occupants are scolding most unreasonably about the slowness of the saw mill and the planer people. As a matter of fact, there are more houses to be put up than 300 ordinary country mills could furnish the lumber for if they were kept running without cessation from Sunday at midnight until the corresponding hour the next Saturday for weeks. What is the meaning of all this? Over and over again I have seen the same kind of excitement in the far West, but in six years of careful watching of the South I have never met its like or anything approximating it. Why, then, this excitement at Tallapoosa? Having looked the field over with an earnest desire to solve the riddle, I have reached what I believe to be a correct conclusion. It is this: Beyond all other places in the South, this is a Northern, (or, as a native put it to me,) "a Yankee town." He was not good-natured when he said it. There was obvious prejudice in his tone, in the expression of his face, in his phrasing, but it gave me a clue to follow. Yes; Tallapoosa is a Northern town. New York, Massachusetts and Connecticut men, having keen eyes for the main chance, came down here last year to see what they could see. They went to many of the places that had been "boomed" and studied them; they saw that what they had read or had been told about the rapid growth of those places was true. * * * They wished to get in at the bottom themselves, and hunted for a place. In their investigations they found this spot. Most of it belonged to two Georgians, citizens of Atlanta, who

had inherited it from their father. The latter was a canny Scot, who early in life went to Georgia and accumulated wealth. His sons, blessed with an American education, and inheriting the shrewdness of their sire, had understood the value of his investment here and had added largely to it. The McBride brothers could not be deceived. They knew the value of what they had, and were at first indisposed to part with it. Eventually they yielded to pressure, and became shareholders with those who were anxious to invest in this place. A company was organized under the laws of another State (Maine, I think,) and then a systematic plan was adopted for giving it prominence before the world. I question greatly whether they took the right course. The style of the florid advertisements put out was altogether too much like that employed by certain fraudulent Florida companies (since exposed) for the deception of the credulous. They cast a shade of doubt upon the merits of the place and the honesty of its promoters. There are those who expect to find the fabled crock of gold at the base of the rainbow, but they are exceptions to the rule among American citizens. Moreover, one great metropolitan journal (it had received no advertising from the company,) sent a correspondent here instructed to discover the fraud and denounce it. He did the last without finding the first, but the latter I did not know till I came here and saw for myself. There is no fraud or humbug in Tallapoosa, nor has there been any intention in that direction among those who have diligently "boomed" it. On the contrary, in their anxiety to tell all their hopes and expectations for their favorite, and at the same time to guard against overstatements, they have inadvertently given to their advertisements the peculiar ambiguities that discredited them and it. This may seem an anomaly, but it is the truth.

Now, why is Tallapoosa destined to be a large and important city? Let me answer that question by giving you indisputable facts, commencing with its geography. It is situated at the western escarpment or edge of the Piedmont plateau, at an elevation of 1,200 feet or more above tidewater. To the west, at Davisville, some twenty seven miles distant by rail road, lie the Silurian valleys. These sweep to the north and east, centering in North Georgia at Cedartown, and form altogether one of the grandest belts of iron ore in the South, or on this continent. A broad, truthful description of this iron ore range would be to say that it extends from below Talladega, Alabama, spreading many miles in width, including Davisville on its eastern and Anniston on its western side, then sweeping around the promontory of the Piedmont plateau on which Tallapoosa is located, it passes eastward and northward (including Cedartown and Cartersville, Georgia, on its southern edge), and, trending more to the north, it passes through Northwest Georgia, Western North Carolina and East Tennessee into Virginia, but its greatest development lies in the country of which this place is the immediate natural center. Given, therefore, the necessary transportation facilities there is nothing to prevent Tallapoosa from becoming in due season one of the flourishing iron manufacturing towns of the Gulf States. Nor need it for years to come to go outside its own limits for ore, for in thirteen openings made by the proprietors such large deposits of brown hematite have been uncovered as go to show that there is on the ground a supply sufficient for all the furnaces that may be started here for many years. Here also is an abundance of limestone for fluxing and of marble—a beautiful variegated marble of unusual grain and fineness for ornamental inside work. The proprietors' company is now testing this deposit with

a diamond drill, to determine its extent and the quality of the rock. They have also found veins of graphite and others of gold-bearing rock, both of which may be classed as "great expectations," for there has been no such prospecting or development yet as to warrant any certain declarations concerning them.

Aside from its central position to the iron belt, Tallapoosa has the advantage of being surrounded for miles in all directions by fine forests of pine and hardwoods. These furnish cheap lumber for building, plenty of material for charcoal for iron furnaces, and also all that will be needed for many years for manufacturers of wooden wares of every kind. With this abundance of raw materials within easy reach, the place ought to become an industrial center of no mean importance. That it will there is every reason to believe, for the people who are settling here are workers, with money enough at command to engage in such enterprises as will immediately pay. They have already begun operations. The Tallapoosa Furnace Co. will finish next autumn a plant for the production of high grade iron, every pound of which will be used on the spot in the manufacture of car wheels and of malleable castings. Mr. O. W. Bullock, a well known and successful hardware manufacturer of Springfield, Mass., who is largely interested in Tallapoosa property, is president of this company, and is as enthusiastic as it is possible for a cool, sagacious man to be over its prospects. Professor J. A. Burns, formerly of New Haven, Conn., but since the war a citizen of Atlanta, Ga., the general manager of the company, has invested largely in it, and has no doubt of its success.

Another industry for which the foundation has been laid is a company for glass making with a capital of \$50,000. Some practical men from Michigan have nearly completed a sash, blind and door factory. In addition to these a number of small industries have been started by Northern men. When it is remembered that this town was organized less than a year ago; that all its new citizens have arrived since last August, most of them since last December, it will be seen that it has gone ahead famously during its brief existence. It is evident that there must be other than purely business considerations to influence such numbers to settle here, and there are. The healthful location, the elevation, the mild climate of Tallapoosa have all exerted an influence upon these new citizens. The town site is a series of ravines. The numerous streets cut through it run up and down, and wind around the hills. On both sides are strong creeks flowing into the Tallapoosa. The earth is firm, and is packed by nature with quartz, pebbles and fragments to such an extent that every street is practically macadamized. There is no mud, no standing water after a rain. This and the elevation combine to give an airy, pure and exhilarating atmosphere. It is a place where those in delicate health or suffering from rheumatism or nervous diseases experience relief and rest. The undulating surface gives opportunities for lovely landscape effects. The trunk line of railroad passing through Tallapoosa enables its people to reach New Orleans, Savannah, Chicago or New York in from 30 to 40 hours. The genial winters make the spot specially attractive to Northern blizzard sufferers, while the altitude, the shade and the healthful summer atmosphere are peculiarly agreeable to the people of the Southern lowlands. It is a mid-climate to which people of all sections may resort for health or for recreation. Taking all these things into account, I do not wonder that this unknown village of a year ago is fast developing into a considerable town. It is now a lusty infant but nine months old. What it will be at the opening of the twentieth century no one is wise enough to predict.

Aetna Medium and High-Speed Engines.

The Aetna engines shown in the accompanying engravings are made from entirely new designs by the Aetna Machine Works, Warren, Ohio, an old and well established concern founded in the year 1848. They are made in sizes ranging from 10 to 1,000 horse power, intended for general pur-

oughly described in their new catalogue for 1888.

In conclusion, the Aetna engine has already taken a high place as an efficient and reliable motive power for furnaces, wire and rolling mills, and orders are now being booked rapidly for the larger sizes, to go into mammoth plants in all parts of the country. Any further information will be cheerfully given by the manufacturers upon application.

American Press Association, was recently elected to fill the office of director and vice-president, made vacant by the death of Thomas W. Johnson.

A Fine Water Wheel.

A local paper of Dolgeville, New York, says: Alfred Dolge has just completed one of the largest, finest and most convenient

quently noiseless. The power is directly distributed from the wheel shaft with the following double electric leather belts: one 36 inches wide, one 24 inches wide and two 16 inches wide. All the belts are under perfect control. Any one or all of the belts can be stopped instantly without interfering with the wheel or the machinery, and without one belt interfering with another. The Alfred Dolge mill is counted as one of the best equipped mills in Herkimer county, on account of the modern patents and improvements which are constantly added to the same. Mr. John L. Carnwright, the well-known millwright of Herki-

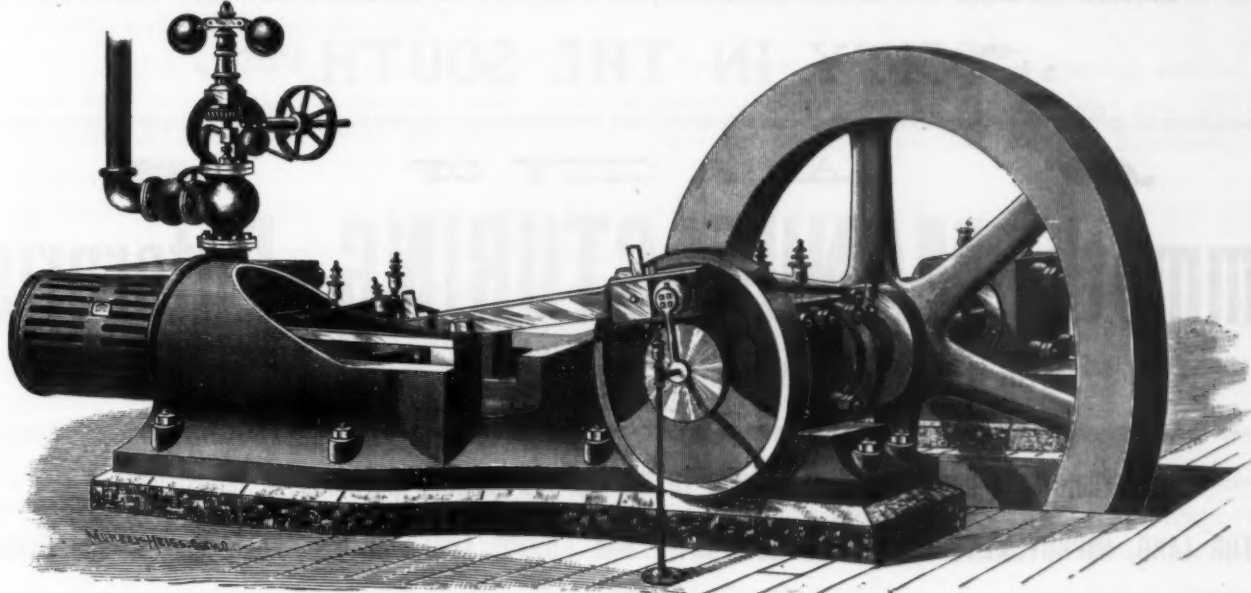


FIG. 1.—AETNA ENGINE.

poses, especially for heavy duty. They are of the slide-valve pattern and constructed with an idea of realizing the highest economy in the use of steam. They are handsome in appearance and finish, strong and durable, and are placed on the market at a moderate cost.

One of the features of the Aetna engine, and one that will meet the engineer's approval, is its accessibility, all the moving

parts being in plain sight and within easy reach for adjustment. The Electro-Automatic Transit Co., of Baltimore City, is engaged in constructing a test line to thoroughly demonstrate its system of rapid transit by electricity at Laurel, Md. The line will be in a circle of about two miles, which will afford every facility for testing, and, if necessary, a circuit of a thousand miles can be made. All appliances connected with the perfection and demonstration of the practicability of

and economical water-powers imaginable by adding to his works a double horizontal Victor turbine water wheel, manufactured by Stilwell & Bierce, of Dayton, Ohio, with a capacity of 550 horse power, a brief description of which is as follows:

The water wheels are placed in large iron flumes, supported on solid masonry, with iron girders and columns. The wheel pit is 12 feet deep by 23 feet square, with 4 feet of water below the end of the draft tubes. The water is conducted to the wheels through a wooden trunk or tube 250 feet long, 8 feet deep and 10 feet wide, with a fall for the water of 25 feet, giving both felt and lumber mills the required amount of power to run the many machines necessary for the manufacture of goods, and also the four large Edison's for the electric lights.

Another great advantage of the water wheels is the

mer county, can feel proud of these gigantic water wheels, which were built under his supervision, every part being adjusted without any interruption. Another water wheel of this kind cannot be found in the country.

As usual, Mr. Dolge has selected the best attainable, regardless of cost of construction, as the best is the cheapest in the end. As for compactness, simplicity, strength and accessibility, the Victor turbine wheel excels any other. Several others have been tried by Mr. Dolge, but he considers the Victor the best, and our prominent millwrights, who have watched the construction of this wheel from beginning to end, join in saying it surpasses anything they have seen before.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting

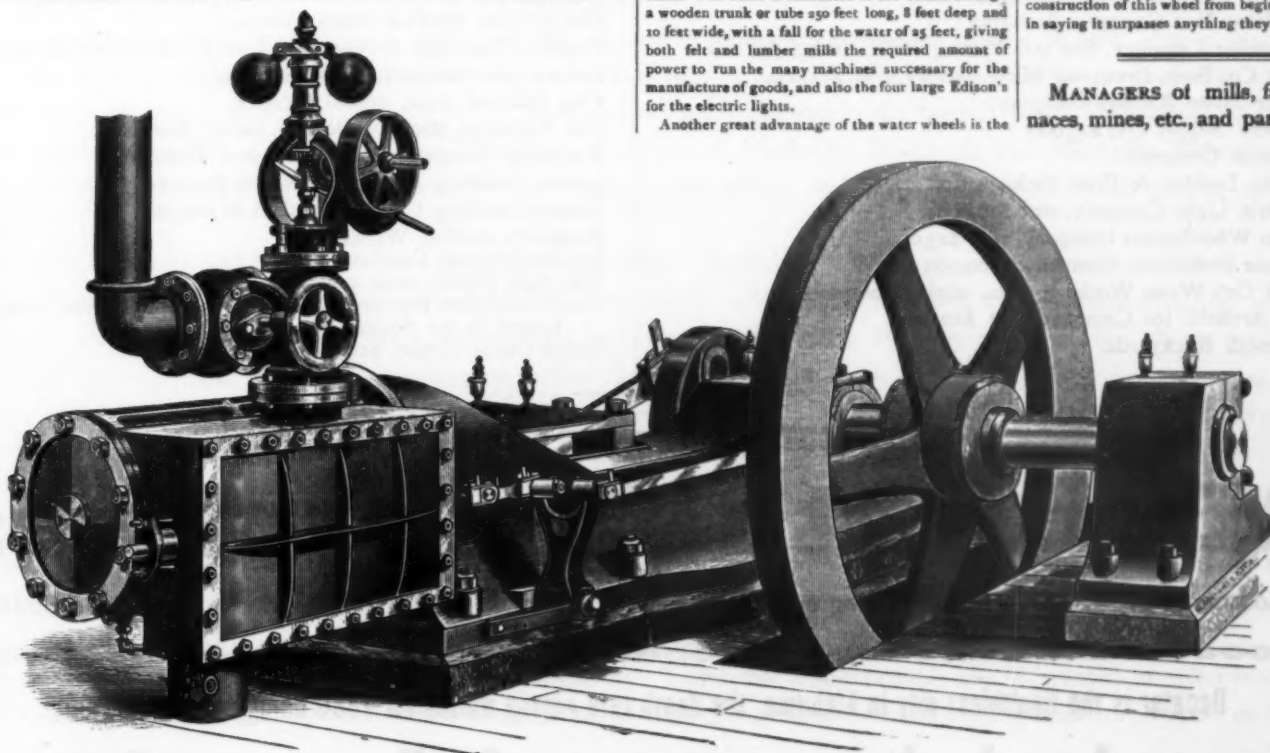


FIG. 2.—AETNA ENGINE.

parts being in plain sight and within easy reach for adjustment.

The lubrication has been well looked after also, and the large wearing surfaces contribute to make this one of the most durable of steam engines.

The subjects of pressure speed, regulation, and all the other minor details of construction have been carefully considered by the Aetna Machine Co., and thor-

oughly tested to the entire satisfaction of the company, after which the general public will be invited to witness the trial of what bids fair to be an immense success, and one which will completely revolutionize the carriage system of the world at large. The line will be constructed very near the Baltimore & Ohio Railroad. Mr. O. J. Smith, of New York, president of the

abolishment of gears, which are not necessary, because of their horizontal structure. Thus an enormous amount of time and money is saved. With the old arrangement it happened that the cog would give out when considerable work accumulated and when actually not a moment of time could well be spared.

A large friction clutch coupling of 600 horse-power makes the connections of the mills with the water wheels. Either mill can be run without interfering with the other. The advantage of this is readily seen by every manufacturer and mill-owner.

The water wheel, being horizontal, it is conso-

manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the **MANUFACTURERS' RECORD**. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

DECATUR, ALA.

Offers outside investors better inducements to locate than any other

 CITY IN THE SOUTH. 

AS A CITY OF

Mammoth MANUFACTURING Enterprises,

She has few equals and no superiors in the South.

There have been located at Decatur in the last few months the following Industries :

THE DECATUR LAND, IMPROVEMENT & FURNACE COMPANY. Has 50,000 ACRES of Iron, Coal, Mineral and Timber LANDS.

United States Rolling Stock Company's Plant, from Urbana, Ohio,
\$1,000,000.

Louisville & Nashville Railway Construction Shops, \$300,000.

Charcoal Company's plant, costing \$120,000.

A seventy-ton Charcoal Iron Furnace, costing \$190,000.

A one hundred-ton Blast Iron Furnace, costing \$225,000.

The Decatur Iron Bridge Construction Company; cost of plant, \$100,000.

The American Oak Extract Company's plant, costing \$60,000.

Ivens & Sons Steam Boiler and Engine Works, costing \$100,000.

Morse Cotton Compress plant, costing \$60,000.

Southern Horse Nail Company, \$100,000.

Decatur Lumber Company, Saw and Planing Mills, costing \$50,000.

Berthard & Co., Sash, Door and Blind Factory, cost \$15,000.

The Decatur Street Railway Company.

The Plumbers' Supply Co., \$25,000.

The Telephone Company.

The Alabama Lumber & Fruit Package Co.

Brush Electric Light Company, cost \$10,000.

The Ironton Wheelbarrow Company, cost \$25,000.

The St. Louis Investment Company, \$200,000.

Howland & Co's Water Works System, costing \$200,000.

Bleymeyer Artificial Ice Company, cost \$10,000.

Four Mammoth Brickyards.

Jones, Poley & Co's Lumber Yards.

The Hoosier Mills & Building Company.

The Gate City Sash & Door Company.

Decatur Car Wheel & Construction Company, \$60,000.

Arantz Bro's Mills and Lumber Yards.

Grant & Co's Furniture Factory.

Decatur Carriage Company.

Southern Lumber Company.

H. S. Freeman's Mills and Lumber Yards.

The Alabama Farmer's Friend Fence Machine Company.

The Decatur Artificial Stone Company.

Decatur Chain and Architectural Iron Works, capital \$100,000.

Natural Gas Company, capital \$200,000.

First National Bank, capital \$100,000.

The Exchange Bank of Decatur, capital \$100,000.

Merchants' Insurance Company, capital \$100,000

Decatur Building Association, capital \$300,000.

Decatur Building Company, capital \$1,000,000.

Buchheit's Bottling Works.

Decatur Printing Company.

Two daily papers, three weekly papers.

Two hotels—one \$100,000, completed, and one \$300,000 being built; the largest in the South.

Grand Opera House, \$100,000.

THERE ARE OTHER

* Mammoth Enterprises *

Locating here, and contracts are being made with some of the most extensive industries in the United States.

Decatur is the Healthiest city in Alabama, the death rate among whites for 1886 being only 11 in 1,000.

Decatur Land, Improvement & Furnace Company.

E. C. GORDON, President.

H. G. BOND, Vice-Prest. and Gen. Manager.

W. T. MULLIGAN, Secretary.

This Company has been pre-eminently successful in promoting the interests of the city of Decatur.

CORRESPONDENCE SOLICITED WITH PARTIES SEEKING LOCATIONS.

A RETROSPECT.

THE past year or two have witnessed a wonderful upheaval in the ways, customs and activities of the people of a goodly portion of the State of Alabama. It has chronicled a progress that a decade before had not shown. It was not the discovery of a new truth, nor the development of a new fact, but a sudden and impressive realization of the utility and value of truths and facts known for years.

The mineral section of Alabama (the north central portion) before the civil war was fairly well settled, and had attractions of climate in an even and healthful temperature and a pure, invigorating atmosphere; of fertile valleys and hills adapted to cotton, grain, fruits and pasturage, and an abundant and well-distributed water supply that made its inhabitants contented, happy and prosperous.

The great civil war was a revolution in more senses than that historically attributed to it. It brought out elements that changed destinies. Many years seemed to be absorbed in the process, but the leaven of facts was working, and the development was sudden and startling. In this section the two great factors in the world's industrial economy—coal and iron, which had virtually been the basis of England's great wealth and power, and of Pennsylvania's marvellous prosperity—were found in equal quantity and quality, and surprisingly more available for economic working and reduction. The remarkable development in progress in this section is the result of the impressive realization of these facts.

This development seems rapid, and yet is slow. With natural resources equal, if not greater, than those of Pennsylvania and natural advantages far superior, even at the rate of progress of the past few months, it will be decades before we can approximate to her standard. As in Pennsylvania, so here are certain points where a combination of advantages will center the greater industrial developments; where coal is most abundant and available for working and handling; the ores rich and inexhaustible; limestone abundant; a most eligible site with attractive surroundings; an ample water supply; a fertile contiguous territory; abundant and competitive transportation facilities, and a central location. Such a point is

Bessemer, Ala.

Within a mile of its furnaces the ore is mined and the limestone found in exhaustible beds. Within nine miles, in eight-foot seams, the best of coking coal,—the ore and coal both *mined and delivered at less than one dollar per ton*. Situated in one of the most charming and picturesque sections of the South, on a broad plateau in the famous Jones Valley, twelve miles from Birmingham, midway between Chattanooga and Meridian, Mobile and Nashville, Savannah and Memphis, New Orleans and Louisville, with railroads radiating to each,—seven lines already completed and three others surveyed, two of them under construction.

On the 12th of April, 1887, the first lot was offered and sold in Bessemer. Within a year's time an actual investment or outlay in improvements of over *two million* dollars has been made within its limits, and a population of 3,500 people has located there. Magnificent plants of iron furnaces, iron and steel rolling mills, foundry and machine shops, screw works, planing and drying mills and wood working factory, fire-brick works, building-brick works, etc., have been erected. Choice business blocks costing from twenty-five thousand to one hundred and twenty-five thousand dollars have been constructed, and nearly four hundred buildings have been completed or are near completion.

Yet Bessemer has not been advertised, for it has grown fully as rapidly as stability of growth and prosperous development would warrant, and it has to its credit a rapidity of growth and development unrivalled in this country.

Bessemer is destined to be a large milling and manufacturing center and prosperous city, for its coal and iron fields are inexhaustible, and its transportation facilities are unexcelled in the South; for nearly all the various manufacturing industries and kinds of business enterprises it affords advantages that cannot be rivalled in this country.

The facts of Bessemer court the most rigid investigation. Facts, not expectations, are suggested to enlist interest and attract attention. In all that may be published under our name concerning Bessemer, the reality and correctness of the statements can be relied upon.

The Bessemer Land and Improvement Co., upon whose property Bessemer is largely built, will promptly furnish information as asked for, and offer substantial inducements in the way of *Sites, Subscriptions, Stock or Loans*, to all industrial enterprises giving remunerative employment to the people.

Bessemer Land and Improvement Company,

WM. BERNEY, President. H. M. McNUTT, Secretary.

ALABAMA'S GREAT MINERAL WEALTH

SURROUNDS THE

★ CITY OF TALLADEGA, ★

Which, according to statistics, is the **MOST HEALTHFUL CITY IN ALABAMA**, and the County Seat of Talladega County.

THE CITY HAS A POPULATION OF 5,000, AND ITS POPULATION IS RAPIDLY INCREASING.

TALLADEGA is on the main line of the E. T. V. & G. Railroad, the A. & A. Railroad, and is the present terminus of the T. & C. Railroad. Work is rapidly progressing on the Birmingham & Savannah Air Line Road, between Birmingham and Savannah, and within twelve months this road will be completed via Talladega from Birmingham to Savannah, which will place Talladega on the direct line from Birmingham to deep water on the Atlantic, making

TALLADEGA ONE OF THE BEST DISTRIBUTING POINTS IN THE STATE.

THE CITY HAS

AN EXCELLENT SYSTEM OF COMMON GRADED SCHOOLS,

With a scholastic population of 500, and *THE MOST COMMODIOUS AND ATTRACTIVE PUBLIC SCHOOL BUILDING IN THE STATE*. The main building is a three-story brick, slate roof structure, well ventilated, heated by steam; has accommodations and seating capacity for 500 pupils. This school is owned and sustained by the city. All branches of English literature, foreign languages, music, the sciences and art, are taught for a nominal tuition. Among other educational institutions are the following:

SYNODICAL FEMALE INSTITUTE, Property valued at \$50,000.

D. D. & B. INSTITUTE, Property valued at \$150,000.

BLIND INSTITUTE, (in course of construction,) property valued at \$150,000.

FOSTER COLLEGE, property valued at \$150,000.

No other city in Alabama has so many educational institutions and so many public buildings.

← TALLADEGA HAS THE MOST COMPLETE SYSTEM OF WATER WORKS IN THE STATE. →

The stand pipe has a capacity of 175,000 gallons, and into this reservoir a supply of fresh, clear, pure water is pumped every day from a large spring located in the heart of the city, which discharges over 2,000,000 gallons per day. The gravity pressure from this system is 90 pounds to the square inch in the business portion of the city. The city has broad streets, well macadamized and shaded with beautiful trees, and is well lighted with a *SUPERIOR QUALITY OF GAS*. Sixty fire plugs and forty gas lamps protect against fire and illuminate the streets.

A LARGE FURNACE PLANT gives employment to thousands of hands, and makes a high grade of chilled car-wheel iron from ores, limestone and coal within ten minutes haul by rail, or an hour's haul by wagon. **FOUR LARGE LUMBER MILLS**, with an aggregate daily capacity of 200,000 feet of lumber, cut from the long-leaved yellow Pine of this country. **FOUR BRICK YARDS** are in active operation. A **SASH, DOOR and BLIND FACTORY**, a **FOUNDRY, MACHINE SHOP, FLOUR MILL, COTTON-SEED OIL MILL**, and various other industries are in successful operation, and the **TALLADEGA ICE CO.** cools the thrifty population with pure ice at 50 cents per hundred. Another large furnace plant will be completed within the next ten months. A Spoke and Handle Factory and many other industries are projected, with a view to early completion.

Taxable property has increased 100 per cent. within the past twelve months. The rate of taxation is limited in the city charter to half of one per cent., and the city offers an exemption from taxation to all manufacturing enterprises for a period of ten years. The county of Talladega supplies more crude material, in the way of minerals and timber, than any other county in the State. Almost within the corporate limits of the city are extensive deposits of the highest grades of limonite ores, yielding 50 to 58 per cent. metallic iron, with only a trace of phosphorus, and limestone abounds in the greatest abundance. Coal is within twenty miles by rail.

THE TALLADEGA LAND & IMPROVEMENT CO. owns 5,000 lots suitable for residences, business and manufacturing, in and adjacent to the city. Lots are donated to manufacturing enterprises, and liberal inducements offered to actual settlers. **SPRING LAKE PARK** is owned by this company, and it is being made the most attractive resort in the State. The lake covers an area of seven acres, and is a beautiful sheet of clear spring water. Parties seeking a healthy climate, free from malaria and epidemics, and a prosperous city, are invited to visit Talladega. Address for maps, etc.

The Talladega Land & Improvement Co., **Talladega, Ala.**

SHEFFIELD, Colbert County, Ala.

The Iron Manufacturing Center of the South.

BEING at the *head of navigation*, and on the *south bank* of the Tennessee river, Sheffield is the *natural outlet* for the mineral and manufacturing products of Alabama and neighboring States seeking a water route to points on the Ohio and Mississippi rivers, and to the Gulf of Mexico, as well as the best *distributing point* over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. *Four railroads* certain, and several others assured. *Principal shops of Memphis & Charleston Railroad* will be erected here *suant to written contract*. These will employ between *four hundred and five hundred mechanics*, and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here.

Five Blast Furnaces Now Under Construction,

Of which one is finished, and the remaining four contracted to completion the present summer, have estimated capacity of 700 tons pig iron per day. This is 40 per cent. more than now manufactured at Birmingham, Alabama. Experts do not hesitate to say that *iron can be manufactured more cheaply* at Sheffield than at Birmingham, and its *river transportation facilities* will enable Sheffield iron to reach the principal markets at a saving of from

\$2.00 TO \$2.50 PER TON.

A first-class daily newspaper is regularly issued. Furniture Factory, Bottling Works, Bakery, Dummy Street Railroad, a 40-inch Morse Cotton Compress, Electric Lights, Agricultural Implement Works, 3 Steam Brick Works, 2 Hand Brick Works, 2 Steam Wood-Working Establishments, Water Works, 2 Banks, a Savings Bank, and Steam Job Printing Office already in successful operation, and Iron Pipe Works, 15-ton Ice Machine and five-story hotel, with all modern appliances, will be erected. The Cleveland Hotel, Park House and numerous boarding houses furnish accommodations to travelers. Postoffice, Telegraph Office and Express Office already established. Paint Works and Stove Works now under construction. Other manufacturing establishments under consideration, and will probably be built shortly.

Good Water. Free Public Schools and Churches. Health and Climate Unsurpassed.

Drainage excellent. Splendid opening for men of push and energy. No "Old Fogy" element here.

No better point for profitable investment.

Sites for Manufacturing Enterprises,

And for Free Public Schools and Churches

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; August 21st, 1887, by actual count, 2,588. Increase of population, 300 per cent. in eight months, and only limited by accommodations.

Three years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three-story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants.

LIMESTONE of excellent quality for *fluxing iron* in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of *brown hematite iron ore* within twenty miles, along the lines of two Sheffield railroads. The Sheffield & Birmingham Railroad runs through the heart of the *Warrior Coal Fields*, which abound in first-class *coking, steam, gas and grate coal*. *Timber* is abundant and cheap.

The *Memphis & Charleston Railroad* and the *Sheffield & Birmingham Railroad* are now in operation into Sheffield. The *Louisville & Nashville Railroad Co.* is now extending its *Nashville, Florence and Sheffield* division, which will be completed to Sheffield before July 1st, 1888. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the *best combined river and railroad transportation center* in the South.

Every merchant and every established manufacturing enterprise is doing a profitable business. *More are needed.* For further information address

WM. L. CHAMBERS, Vice-Prest. and Manager

Sheffield Land, Iron & Coal Co., - Sheffield, Ala.

This is an Anniston Page.

[Any desired information not found in this page advertisement can be obtained by addressing the Anniston City Land Co., Anniston, Ala.]

Wonderful Industrial Progress.

[From Anniston Hot Blast, July 17.]

In the Hot Blast of last Sunday it was stated that the amount of capital now invested in the industries of Anniston exceeded the total amount invested in manufactures in the entire State in 1880. This statement has excited so much interest that we present to-day the figures in detail. In the enumeration below we have included the Anniston & Cincinnati and Anniston & Atlantic Railroads, for the reason that both of these roads were built mainly by the Woodstock Iron Co., and are virtually part of the business of that company, though under different names. Their capital (which represents their cost) is therefore a part of Anniston's manufacturing capital.

Name of Company.	Actual Capital
Woodstock Iron Co.	\$3,000,000
United States Rolling Stock Co's Anniston Works, including car works, car wheel works, rolling mill, foundries, etc.	1,000,000
Cahaba Coal Mines	1,400,000
Anniston Mfg. Co. (cotton mill)	250,000
Anniston Pipe Works	300,000
Clifton Iron Co.	300,000
Taylor's Fire Brick Works	150,000
Universal Horse Shoe Mfg. Co.	300,000
Anniston Blooming	50,000
Murray & Stevenson's Foundry	30,000
Anniston Boiler and Sheet Iron Works	10,000
Anniston Cotton Compress	100,000
Anniston Water Works and Anniston Electric Light Works	100,000
Anniston Gas Works	50,000
Barbour Machine Works	60,000
Anniston & Atlantic Railroad	750,000
Anniston & Cincinnati Railroad	1,000,000
Stove Works	50,000
Ice Factories (two)	50,000
Planing Mills, Brick Yards, etc.	100,000
	\$9,300,000

The Anniston Pipe Works, in addition to the amount in cash given above, owns 120 acres of land within the city limits, easily worth from \$1,000 to \$2,000 an acre, or \$120,000 to \$240,000. The Anniston Cotton Mill is capitalized at \$250,000, but it really represents an investment of over \$400,000, the difference having been spent in improvements and enlargements. The Woodstock Iron Co. has pursued the policy, year after year, of investing very heavily out of its surplus earnings in mineral and timber lands, until it now owns, free from encumbrances, 60,000 acres of the best lands in the State. Taking these facts into consideration, and counting the smaller industries not included in the above list, the manufacturing capital of Anniston will be found to reach \$10,000,000. The total amount invested in manufactures in 1880, as shown by the census report, was \$9,668,000.

This is a wonderful showing. It may well command the attention, not only of the State, but of the South and the entire Union. Here is a town of 10,000 to 12,000 people with more money invested in industrial enterprises than the population of the whole State, numbering 1,262,505, had in 1880. It is an astounding revelation of the progress this city is making; progress such as the world has rarely ever seen.

Going away from Alabama we find that the great State of Texas had in 1880 only \$9,245,000 manufacturing capital, or less than Anniston has now. Mississippi had \$4,727,000, less than half as much as Anniston has. And even Kansas, which has for so many years been known as the great "booming" State, had in 1880 only \$11,192,000, but a little more than the present industrial capital of Anniston, which then was only a village.

With facts such as these Anniston may justly boast of her growth. And there is ample ground for boasting, also, in the additional fact that during the period of this marvelous growth Anniston has never known a failure of any importance even in its retail trade. This fact abundantly attests the solid and permanent character of Anniston's growth, as the figures given above show its astounding rapidity.

It is worthy of mention, also, that these great industries are on a most secure and

substantial basis. They stand almost alone among institutions of the sort, in that they are not encumbered by a dollar of indebtedness and have outstanding no bond or note or any other evidence of debt.

This was aptly and forcibly set forth in the following language by Mr. Samuel Noble in a speech delivered last year at the banquet given to Hon. Wm. D. Kelley:

Thus, as far as possible, has the future of Anniston been secured, and it seems that nothing has been unthought of or left undone. Its great industries located; its means of transportation provided; no niggard hand has cramped its new enterprise for space, but every acre that will be needed for generations to come, even under the greatest favorable development, has been given them. All this has been done, not by the expenditure of hundreds of thousands, but by many millions of dollars. It has been done without the issue of a bond or mortgage, a note or a single evidence of debt, relieving all our enterprise of all fixed charges either in times of prosperity or depression. It has been done judiciously, and to make profitable the use of nature's capital in the great mineral resources with which she has surrounded us.

Alabama's Giant City.

Anniston Still Enjoying a Prosperous Era—A Peep at Some of its New Industries.

[Chattanooga Times, July 18.]

A member of the Times staff visited Anniston this week and found Alabama's young giant city still enjoying its great and almost unequalled era of prosperity. Aside from Chattanooga, perhaps no city in the South is making such onward strides as Anniston, and all, too, of the most substantial nature. Aside from its industrial growth, the city is growing very rapidly, and it can boast of many beautiful and costly residences.

There are many splendid new industries springing up in Anniston, among which are two immense charcoal furnaces, a horseshoe factory and the immense pipe works, of which so much has been written. The furnaces are being built by the Woodstock Iron Co., and will cost \$700,000, being, it is said, the finest and most complete ever built in the South. They contain every modern appliance, some of which will reduce the cost of production. The pipe works must be seen to be appreciated. There are many buildings covering a large area of ground, the cast house alone being 160x1,600 feet, and contains eight pits. Anniston is indeed booming, and will soon be a more substantial rival of Chattanooga than Birmingham.

[Interview in Atlanta Constitution, July 18.]

"In spite of the dull times," said Mr. Allison Greene, "the growth of Anniston continues to be amazing."

"Has the town grown much since you saw it last?"

"I literally did not know the town. I could not find the Inn. Mr. Constantine, formerly of Atlanta, has just started a block of three stores, three stories high, and has rented every room, although the foundations are just being laid. You can look in any direction in Anniston and see new buildings going up, and there is an air of thrift and prosperity about the town that catches every stranger. They are just finishing a three-story city hall, one of the handsomest public buildings in Anniston, finished in hardwood, and everything first-class. A new gas plant is just being finished and mains are being laid over the city. Anniston is bound to be the greatest Alabama city, in my opinion, and no one who studies it can doubt this. We will see it pass Birmingham whirling; mark what I say."

There are splendid openings in Anniston for many industries, large and small, such as cotton and woolen mills, rolling mills, foundries and machine shops, chain works, agricultural implement factories, nail mills, wood-working establishments of all kinds, brick and tile works, flour and corn mills, canning factories, shoe factories, wholesale dry goods, grocery and hardware houses, &c., &c.

"ANNISTON:

A Romance of the New South."

HON. WM. D. KELLEY,

THE GREAT PENNSYLVANIA STATESMAN,

After many weeks of careful investigation of the resources and advantages of the iron section of Alabama, lately wrote an exceedingly interesting article entitled "Anniston: A Romance of the New South." In this article he gave an enthusiastic description of the growth of Anniston, widely known as "The Model City of the South," and of its wonderful development and marvellous mineral wealth. Judge Kelley declares that Anniston is an

"IDEAL INDUSTRIAL CENTER,"

And says that "It is in many respects the most remarkable center of the iron industry in the Southern States."

Anniston is beautifully located in the Alabama Mountains. It is surrounded by the *Most Marvellous Mineral Resources of the South, by Vast Forests of Virgin Timber and by a Magnificent Farming Country.* There are twelve Furnaces in the "Anniston Iron District," (two of them making the celebrated "Woodstock Iron," being within the city limits, and two more, to make Coke Iron, being under construction.) Anniston now has Three Banks, the Best Schools in the State, Fine Churches, Opera House, one of the Largest Cotton Mills in Alabama, Immense Car Wheel and Car Axle Works, Car Works, Rolling Mill, Machine Shops and Foundries, a large Steel Blooming, the only one in the South, a 90-inch Morse Cotton Compress, immense Fire Brick Works, costing \$100,000, Planing Mills, Water Works, Electric Light Works, two Ice Factories, &c., and is now building two Coke Furnaces, to turn out 100,000 tons of iron a year; Iron Pipe Works, the largest in the world, to employ 900 hands and consume 200 tons of pig iron a day; a \$60,000 Agricultural Implement Factory, \$300,000 Horse-shoe Works, a \$30,000 Union Depot, &c.

THE UNITED STATES ROLLING STOCK COMPANY, OF NEW YORK, having a capital of \$4,000,000, are now building at Anniston

GIGANTIC CAR WORKS,

Including Rolling Mill, Foundry, Machine Shops, &c., to cost \$1,000,000, to employ 1,000 Skilled Mechanics, and to turn out 25 complete Cars a day, including freight, passenger, sleeping and parlor cars, everything, from making the wheels to the upholstering, to be done in these works. This is the most important industrial enterprise ever established in the South by Northern capital.

THE ENTERPRISES

Now under construction, and for the building and running of which every dollar has been raised, will require over 4,000 workmen in addition to those now here. The population, now 12,000, will be about 25,000 by the end of 1888. Great inducements offered to manufacturers to locate here.

OVER 100,000 ACRES

Of the Finest Iron Ore, Timber and Coal Lands in Alabama, including the great Cahaba Coal and Iron Property of 40,000 acres of the best Coking Coals in the South, are owned by Anniston capitalists, and are being developed in the interest of this town. These Lands, the New Furnaces, Pipe Works, Railroads to develop these properties, &c., HAVE ALL BEEN PAID FOR IN CASH, THERE BEING NO DEBTS OR BONDS TO ENCUMBER THESE GREAT ENTERPRISES. There are

SPLENDID OPENINGS HERE

for many industries, large and small, such as Cotton and Woolen Mills, Foundries and Machine Shops, Chain Works, Agricultural Implement Factories, Nail Mills, Wood-Working Establishments of all kinds, Brick and Tile Works, Flour and Corn Mill, &c., &c. Wholesale Dry Goods, Grocery and Hardware Houses are needed, and a large trade could be secured at once.

Contractors and Builders will find splendid opportunities for profitable investments in building dwellings, stores, &c. At least 2,000 new houses will be needed this year to accommodate the people to be brought here to operate the new enterprises under way, and others.

Manufacturers, Merchants and others desiring to locate in the best city in the South where a solid and substantial growth is assured, are invited to visit Anniston or to write for pamphlets, &c., to the

ANNISTON CITY LAND CO., Anniston, Ala.

CONSTRUCTION DEPARTMENT

WE PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.

ALABAMA.

Anniston—Smelting Plant.—The Southern Smelting & Reduction Co., previously reported as chartered at Birmingham to erect a smelting plant, have decided to build it at Anniston. They have secured a site, and will at once commence work on a 20-ton plant to cost \$25,000.

Anniston—Residence.—Dr. J. C. Le Grand has broken ground for a fine residence.

Anniston—Engine Works.—A. A. Arnott, secretary the Bright McNeal Rotary Engine Co., of McPherson, Kan., has been prospecting with a view to removing the works to Anniston.

Anniston—Fire-brick Works.—It is reported that Charles Taylor & Sons have added more machinery to their fire-brick works.

Bessemer—Iron Furnace.—The capacity of the charcoal iron furnace lately reported as to be built by a stock company now being organized will be about 70 tons daily. The Bessemer Land & Improvement Co. can probably give information.

Bessemer—Fire-brick, Pipe and Terra Cotta Works.—The Bessemer Fire-brick & Tile Co., previously reported as organized, have commenced work on their plant, and will build works with a capacity several times as large as first intended. They will employ 100 hands at their works and 75 hands at their clay mines. They have an order for 3,000,000 brick for the new furnaces.

Bessemer—Houses.—A hundred or more houses are to be built at once for the workmen to be employed at the new iron furnaces lately mentioned as to be built.

Bessemer—Iron Furnaces.—It is reported that the company lately mentioned as formed by H. F. De Bardeleben and others to build three 150-ton iron furnaces are about commencing work, and that they will build them at Bessemer. Plans and specifications for the furnaces are now being prepared.

Birmingham—Houses.—C. P. Nunnally has contracted to build a number of houses near Birmingham for the Pioneer Iron & Manufacturing Co.

Birmingham—Railroad.—Thornton & Glenn have contracted to furnish 55 M cross-ties for the extension of the Birmingham Mineral Railroad, previously mentioned.

Birmingham—Lumber.—The Warrior Lumber Co., capital stock \$10,000, has been organized.

Birmingham—Pottery Works.—J. H. Emmonds has been prospecting with a view to establishing pottery works.

Butler—Well.—About \$1,000 have been raised to sink an artesian well. J. Courson can probably give particulars.

Camden—Jail.—Wilcox county will build a jail to cost \$13,500.

Decatur—Extract Works.—The American Oak Extract Co. are putting in additional boilers and engines to about double the capacity of their works.

Decatur—Rolling Mill.—Messrs. Burnhill and Jones, of Wheeling, W. Va., are reported as prospecting with a view to building a rolling mill.

Decatur—Buildings.—Nicholas Ittner will erect a block of four-story buildings.

Demopolis—Barrel and Stave Factory.—C. E. Neff, of Evansville, Ind., is making investigations with a view to building a barrel and stave factory, and has, it is stated, about formed a stock company.

Florence—Paint Factory.—The Florence Paint Co. will probably increase their capital stock to enlarge their factory.

Florence—Shoe Factory.—D. M. Wilson has moved his shoe factory from Calera to Florence.

Fort Deposit—Gin.—Silas Tyson has erected a new gin.

Goodwater—Carriage Factory.—F. G. Colby has erected a carriage and buggy factory.

Jacksonville—Houses.—Parties have commenced work on 12 houses to cost \$1,000 each, and will build 12 others, it is stated.

Jasper—Iron Works.—A. A. Ross and E. C. Davis will be interested in the iron foundry previously reported as to be erected.

Montgomery—Railroad.—The Northwest & Florida Railroad Co., capital stock \$1,800,000, has been organized with N. T. Sprague as president. This company has purchased the Montgomery & Florida Railroad, and will probably change the gauge of the road and extend it.

Montgomery—Varnish Factory.—It is stated that Northern parties are negotiating to start a varnish factory.

Montgomery—Carriage Works.—J. P. Condon has leased the Montgomery Carriage Works and will operate them.

Oxford—Street Railroad.—Efforts are being made to organize the company to build the railroad to Boiling Springs, 3 miles, previously reported.

Selma—Railroad.—The Selma & Cahaba Valley Railroad Co. will hold a meeting on August 27 to execute a mortgage to secure money to carry out the objects of their charter.

Sheffield—Well.—The Sheffield Ice Co. will sink an artesian well.

Sheffield—Furnace.—The Lady Ensley Furnace Co. will add to their furnace plant one blowing engine, 48x84 inches, and one hot blast stove.

Sheffield—Railroad.—Mr. Carrington is making surveys for a railroad to be built from the Cole furnaces to the Tennessee river.

Thomasville—Wagon and Carriage Factory.—A wagon and carriage factory is being erected.

Tuskaloosa—Railroad.—The Memphis & Tuskaloosa Railroad Co. has been chartered and has been consolidated with the Memphis, Oxford & Columbus Railroad Co., of Tennessee, and the Memphis, Columbus & Oxford Railroad Co., of Mississippi. The consolidated company is to be known as the Memphis & Atlantic Railroad Co. Work will probably be commenced about September 12.

ARKANSAS.

Argenta—Street Railroad.—A street railroad is rumored to be built soon.

Arkansas—Canning Factory.—A. W. Palmer, of Fairport, N. Y., contemplates purchasing several hundred acres of land and establishing a canning factory.

Bear—Gold Mining.—The Sand Rock Gold Mining Co. has been chartered under the Nebraska laws to mine for gold, &c. H. A. Dubuque, of Fall River, Mass., is secretary.

Bear—Mining.—It is reported that Gill & Bozell will develop the Eureka property.

Bear—Mine.—The proprietors of the Lone Jack mine are thinking of putting in steam hoisting and pumping machinery.

Bear—Reduction Works.—C. S. Rogers is making investigations of mining and milling machinery with a view to purchasing new machinery for the International Mining Co's reduction works.

Eureka Springs—Saw Mill.—B. E. Woodruff & Son are building a new saw mill and will add molder, scroll saw, &c., later in the year.

Fayetteville—Harrow Factory.—George Anderson and J. R. Hicks, of Kansas City, Mo., have been prospecting with a view to starting a harrow factory.

Fort Smith—Electric Light.—George Tilles has contracted for an Edison incandescent electric light plant to be erected at his opera house.

Fort Smith—Church.—The Cumberland Presbyterians will build a church to cost \$5,000.

Greenwood—Coal Mine.—Messrs. Tatum, Neal and Kersey have sunk a shaft to test coal deposits, and will probably develop.

Greenwood—Coal Lands.—The Missouri Coal Co. will develop their coal lands at Greenwood as soon as a branch road is completed to Gardon.

Helena—Electric Light Plant.—The Helena Electric Light Co. will probably add incandescent machinery to their plant next fall.

Helena—Planing Mills.—The Moline Lumber Co. have lately erected a planing mill at Helena and a planing mill six miles from Helena.

Hot Springs—Hall.—Plans have been prepared for a new city hall. The mayor can give information.

Huntington—Coal Mine.—The Kansas & Texas Coal Mining Co. are developing a coal mine, previously reported.

Little Rock—Fire-alarm System.—A stock company is being formed to put in a fire-alarm system.

Little Rock—Houses.—Mrs. Olive A. De-shon is about commencing work on a \$5,000 residence, and L. Dreyfus will build a residence to cost \$6,000.

Little Rock—Electric Light Plant.—The Little Rock Edison Electric Light & Power Co. has been organized by Angelo Marre, W. O. Thomas and others. They have ordered machinery with a capacity for 1,300 lights, and will soon commence work on buildings.

Lonoke—Water Works.—D. Daniels can give information if anything is done in regard to building the water works previously reported as being agitated.

Pine Bluff—Gin.—A gin will be erected by E. L. Colburn.

Pine Bluff—Ginnery.—J. F. & Ralph Hicks will erect a large ginnery.

Ravenden Springs—Silver Mines.—Parties are investigating silver mines with a view to developing.

Texarkana—Coal Lands.—Chicago (Ill.) parties have optioned lands supposed to contain coal and will make investigations.

FLORIDA.

Cedar Key—Laundry.—E. J. Lutterloh states that he will not start a steam laundry, as lately mentioned.

Chipley—Hotel.—The Chipley Hotel Co., previously reported as being organized to build a hotel, have, it is stated, raised money to build a \$50,000 hotel.

Oakland—Laundry.—A laundry has been started by John Bratt.

Orlando—Church.—The contract to build the church previously reported for the Presbyterians has been let to L. C. Horn and W. C. Stubblefield. It will cost about \$6,000.

Orlando—Factories.—H. G. Garrett has formed, it is stated, a \$40,000 stock company to furnish sites and buildings to secure the establishment of manufacturing enterprises.

Lake Worth—Railroad.—The Jacksonville, Tampa & Key West Railroad Co. (office, Jacksonville) are making surveys for a road from Lake Worth to Jupiter.

St. Augustine—Hotel.—It is reported that \$25,000 will be spent in improving the Hotel Cordova.

Sanford—Railroad.—It is rumored that the Sanford & Indian River Railroad will be extended to Chuluota and that preparations are being made.

Satsuma—Saw Mill.—A saw mill is reported as being erected by the Satsuma Land & Lumber Co.

Starke—Grist Mill, &c.—J. T. Fewkes, of Lakeside, is erecting a grist mill, gin and machinery for manufacturing crates.

Wakulla—Phosphate Lands.—The land (2,080 acres) reported last week as purchased by the Wilcox & Gibbs Guano Co., of Savannah, Ga., is supposed to contain deposits of phosphate. They will develop the phosphate if found.

GEORGIA.

Albany—Ginnery.—Lewis Bros. has purchased machinery for a ginnery.

Albany—Electric Light Plant.—A company has been formed to erect an electric light plant. The Edison system will be used.

Americus—Implement Works.—J. H. Crethers, of Columbus, O., has been prospecting with a view to moving his large agricultural implement works to the South.

Athens—Hall.—The University of Georgia Chapter of Sigma Alpha Epsilon will build a hall to cost \$10,000.

Atlanta.—A land and improvement company has been organized with A. Graves as president.

Augusta—Gas Works.—The Augusta Gas Co. are improving their works at a cost of \$8,000.

Augusta—Water Works.—The water works are being extended at a cost of \$20,000, previously reported.

Brookfield—Saw and Planing Mill.—S. Harrel & Co. will purchase machinery for a saw and planing mill.

Brunswick—Electric Light Plant.—The electric light plant lately reported as to be erected will be owned by the Brunswick Light & Water Co. The Thomson-Houston system will be used, and machinery has been contracted for.

Carrollton—Mill.—W. C. Morrison has purchased a new engine for his mill and may purchase planing machinery.

Cartersville—Gas, Electric Light and Water Works.—George W. Chipman, of Boston, Mass.; Peter W. French, of Weymouth, Mass., and Hiram Blaisdell, of Newton, Mass., have chartered the Cartersville Improvement, Gas & Water Co. to build gas, electric light and water works, etc.

Cartersville—Barrel Factory.—I. P. Davis has started the manufacture of barrels.

Chauncey—Planing Mill, &c.—It is reported that Dodge, Meigs & Co. will add a planing mill and dry kilns to their saw mill.

Conyers—Railroad.—S. A. Pearce, W. H. Pearce and others are thinking of building a two-mile railroad, probably the dummy railroad lately mentioned as being agitated.

Conyers—Granite Quarry.—G. W. Johnson, of Lithonia, and James A. Farmer, of Covington, will open a granite quarry.

Dallas—Cotton Mill.—The Dallas Cotton Mills, reported last week as chartered, have commenced work on their mill. The capacity will be 3,000 spindles and 80 looms at first. The capital stock is \$25,000. Machinery has been bought.

Darien—Saw Mill.—The South Brooklyn Saw Mill Co. will build a saw mill at Cane Creek later in the year.

Gainesville—Fire Apparatus.—The Queen City Steam Fire Engine Co. has been chartered and will purchase fire apparatus.

Gainesville—Wagon Factory.—J. L. Hudson & Sons will move their wagon factory from Cumming to Gainesville, and are now erecting a building. They expect to add the manufacture of plows.

La Grange—Cotton Factory.—The La Grange Oil & Manufacturing Co. have let the contract for the brick and wood work of their cotton factory, previously reported, to J. S. Westbrook, of Griffin. Machinery for the factory is now being negotiated for.

La Grange—Plow Works.—The La Grange Plow Works, reported last week as to erect new buildings for their works, are having plans prepared.

Macon—Machine Shops.—The Covington & Macon Railroad Co. have ordered machinery for their machine shops, previously reported, and will soon have them in operation.

Macon—Car Works.—It is reported that car works are to be built by E. C. Machen and others.

Macon—Bridge.—The Central Railroad & Banking Co. (office, Savannah) have let the contract for building a new iron bridge across the Ocmulgee river.

Macon—Steam Heat.—The contract to put steam heating apparatus in the Wesleyan Female College has been awarded to William Kirkness & Son, of Cincinnati, O., at \$5,285.

Macon—Cotton Factory.—W. A. & J. F. Crutchfield and J. D. Hough will build a cotton factory.

Madison—Hotel.—Parties are making arrangements to build a hotel to cost \$50,000. W. A. Broughton can probably give information.

Madison—Oil Mill.—It is reported that the Southern Cotton Oil Co., of Philadelphia, Pa., who now have eight oil mills in the South, will build a cotton-seed oil mill at Madison.

Madison—Oil Mill and Guano Factory.—A \$40,000 stock company has been formed to build a cotton-seed oil mill and a guano factory. W. A. Broughton can give particulars.

Milledgeville—Ginnery.—James B. Hough is erecting a ginnery.

Newman—School.—The contract to erect the school building previously reported has been received by the R. D. Cole Manufacturing Co.

Pumpkin—Ginnery.—J. H. Baxter will add two gins and a new engine to his ginnery.

Richmond—Cotton Factory.—The Richmond Factory, W. B. Young, president, will build an additional factory, and have let the contract for its erection to John Trowbridge, of Augusta, who will commence work at once. The capacity of the present mill is 3,000 spindles, and the new mill will be as large or larger.

Rockmart—Stone Quarries.—W. H. Pearce, of Columbia, S. C., and others, have, it is stated, formed a \$100,000 stock company to develop stone quarries.

Rome—Marble Quarries.—The Coosa River Marble Co., previously reported as organized to develop the marble on the land of A. D. Hardin if tests proved satisfactory,

will probably soon put in machinery to develop the marble.

Valdosta—Hall.—The town will decide by a popular vote on August 27 whether or not to issue \$10,000 of bonds to build a hall.

Vienna—Courthouse.—A new courthouse is to be built. The cost will be \$25,000.

Waycross—Railroad.—The Savannah, Florida & Western Railway Co. (office, Savannah) have commenced work on a branch road to extend from Waycross to the East Tennessee, Virginia & Georgia Railroad at Hazlehurst.

KENTUCKY.

Ashland—Carriage Factory.—Henry Neff has the contract for erecting a carriage factory for Doute & Miller. It will be two-story, 25x40 feet, with a one-story blacksmith shop, 20x25 feet.

Covington—Soap Factory.—The Anchor Soap Co., capital stock \$10,000, has been chartered by Harry W. Crolley, William Kolb, Henry Kirschner and Mary Crolley.

Fisherville—Hotel.—The Fisherville Gas & Mining Co. will build a hotel at once.

Lebanon—Water Works.—Proposals for building the water works previously reported will be received until August 1 by A. Offutt. The capacity of the reservoir is to be 1,250,000 gallons. \$60,000 of bonds have been voted to build the works.

Louisville—Harness Factory.—The report referred to last week that Beha & Bohr will start a harness factory is not true.

Louisville—Distillery.—J. G. Mattingly and others have incorporated as J. G. Mattingly & Son to manufacture and sell whiskeys, &c. Their capital stock is to be \$200,000.

Louisville—Shirt Factory.—A shirt manufacturer at Newburg, N. Y., is making investigations with a view to moving his factory to Louisville.

Louisville—Church.—The Presbyterians will build a church at Clifton.

Owensboro—Tobacco Factory.—Robert Frayser will erect a new building for his tobacco factory. He will commence removing the present building August 1.

Paducah—Carriage Factory.—N. H. Wilkinson is organizing a company to start a carriage and buggy factory. He has secured a building for the factory and will soon begin work.

Paducah—Electric Light Plant.—G. J. Grammer and others contemplate erecting the electric light plant reported last week. The Westinghouse system will be used.

Paducah—Iron Furnace.—W. W. Jones, of Paris, Tenn., previously reported as organizing a stock company to build a charcoal iron furnace, has, it is stated, about completed the organization of the company.

Paducah—Electric Light Plant.—The Paducah Gas Light Co. will erect an electric light plant at once. Some of the machinery has been purchased.

Red River Iron Works.—Iron Furnace.—C. W. Russell, lessee and agent Estill iron furnace, will put it in operation about August 1. It has been idle for some time.

Scottsville—Flour Mill.—O. S. Bryant is having his flour mill remodeled to the roller system. The capacity will be 60 barrels per diem.

Williamsburg—Institute.—The contract to erect the building for the Williamsburg Baptist Institute has been let to James Cooley, of Knoxville, at \$12,500.

Winchester—Water Works.—Mr. Davidson will make a proposition to build water works.

LOUISIANA.

Baton Rouge—Electric Light Plant.—J. H. Andrews, of Helena, Ark., is negotiating to erect an electric light plant.

Homer—Railroad.—A railroad is projected from Homer to Plaindealing.

New Orleans—Sugar Mills.—The Whitney Iron Works have made supplemental sugar mills to be added to the sugar factories on the plantations of John T. Moore, J. L. Harris, Mrs. Doherty, Banks & Doherty and W. H. Clark. Leeds & Co. have made similar mills to be added to the factories of James A. Ware, R. S. Williams, and Mrs. N. Von Ablefeld.

New Orleans—Electric Light Plant.—The Westinghouse Electric Light Co., of Pittsburgh, Pa., will at once rebuild the Brush electric light plant reported last week as burned. The loss was about \$125,000.

New Orleans—Cotton Compress.—The Orleans Cotton Press will add machinery to their plant.

New Orleans—Sugar Refinery.—The Louisiana Sugar Refinery Co. are making additions to their refinery to cost about \$12,000, which will increase their capacity about 50 per cent.

New Orleans—Oil Works.—The Union Oil Works are being improved at a cost of about \$12,000.

New Orleans—Distilling Works.—Allen & Co. contemplate enlarging their distilling works for manufacturing wood alcohol, &c.

New Orleans—Furniture Factory.—The name of the \$250,000 stock company lately mentioned as being formed to build a furniture factory is the Southern Furniture Manufacturing Co. Work will soon be commenced. William P. Ames is president, and John W. Anderson, vice-president.

Opelousas—Market-house.—Proposals for building a market house, 60x60 feet, will be received until August 1 by B. F. Meginley.

Shreveport—Cottages.—Perrin & Haden have sold land to parties from Illinois who contemplate building a number of cottages.

Shreveport—Implement Factory.—Whited Bros. are negotiating with parties in Terre Haute, Ind., who contemplate starting a factory for manufacturing farm implements.

Louisville—Roofing Works.—Some new machinery has been added to the roofing works of C. H. Conner.

MARYLAND.

Baltimore—Academy.—P. Harris will spend about \$40,000 in improving and redecorating the Academy of Music.

Baltimore—House.—Benjamin B. Owens is preparing plans for a \$20,000 dwelling to be built on Eutaw Place.

Baltimore—Building.—The Female House of Refuge will build a four-story brick addition to their building at Carey and Baker streets.

Baltimore—Brewery.—The Monumental Brewing & Malting Co. will build a five-story brewery corner Conway and Perry streets.

Baltimore—Houses.—E. G. Gorman will erect 5 three-story brick houses on Patterson Park avenue, and 8 two-story brick houses on Orleans street.

Frostburg—Lumber Mill.—Johnson Bros. have lately added some machinery to their lumber mill.

Jefferson—Flour Mill.—B. Lewis & Son have purchased some new machinery for their flour mill near Jefferson.

Kennedyville—Canning Factory.—A canning factory has lately been erected. T. E. Hayes can give information.

Millington—Evaporating Factory.—An evaporating factory is being erected by John and William Biggs.

Rockville—Gold Mining, &c.—Philetus Sawyer, previously reported as mining for gold, is erecting a 10-stamp mill. He has leased 600 acres more of land.

Washington, D. C.—Church.—A new building will be erected at Third and A streets for St. Mark's Church. It is to be of brick, one-story, 56x73 feet, and will cost about \$30,000.

Washington, D. C.—Building.—A. F. Clements has the contract to erect a three-story brick addition to the Academy of the Holy Cross on Massachusetts avenue.

Washington, D. C.—Building.—The contract to erect the additional building for the use of the Signal Service, previously mentioned, has been awarded to Thomas & Driscoll at \$22,994.

Washington, D. C.—Planing Mill.—A large planing mill has been erected by J. B. Hammond. Operations have commenced.

Washington, D. C.—Building.—B. W. Keyer and others will erect a large building at Ninth and D streets to cost about \$60,000. They are preparing to commence operations.

Washington, D. C.—House.—E. Fitzgibbon and Holland & Son have the contract to erect a \$10,000 residence for Mrs. B. T. Juneman.

Washington, D. C.—Engine-house.—The District Commissioners have selected a site to build another engine-house. Plans are being prepared, and bids will soon be advertised for.

Washington, D. C.—Electric Light Plant.—The United States Electric Light Co. will, it is said, enlarge their plant.

Washington, D. C.—Freight Shed.—The Baltimore & Potomac Railroad Co. will build a large iron-covered freight shed.

Washington, D. C.—Church.—A large addition is being built to St. James' Church.

Washington, D. C.—Umbrella Factory.—The McCormick Cane Umbrella Co. (office, 1331 F street, N. W.) contemplate starting a factory for manufacturing umbrellas.

Washington, D. C.—Hall.—The board of trustees of the Catholic University contemplate building a large hall.

Washington, D. C.—Buildings.—Charles W. & Felton E. Brown will erect 6 two-story brick dwellings on North Capitol street; J. A. Buchanan, a \$10,000 brick dwelling at 820 Tenth street; W. A. Kimmell, a \$6,000 brick dwelling at 1102 Third street, S. E.; Charles W. King, 4 brick dwellings to cost \$7,000; Charles Early, 3 brick dwellings on Corcoran street to cost \$9,000; Mrs. Pattelle, a \$9,000 brick house on Massachusetts avenue; Havey Spalding, 2 houses on Eighth street to cost \$5,000; Mrs. Sears, 2 brick houses on Twenty-second street to cost \$10,000; Charles E. Foster, a four-story brick dwelling at 1021 Sixteenth street, N. W., to cost \$25,000; John Miller, 3 three-story brick dwellings on D street, and 1 on New Jersey avenue to cost \$15,000, and M. Saunders, 5 two-story houses.

MISSISSIPPI.

Brookhaven—Lumber Mill.—F. H. Hartman has ordered additional machinery for his lumber mill.

Columbus—Broom Factory.—A. J. Leckeny has moved his broom factory to Columbus.

Greenville—Gin.—W. E. Hunt will build a new gin.

Grenada—School.—The Presbyterians are raising money to build a school to cost \$5,000 or more.

Grenada.—The Grenada County Improvement Co. is being organized. J. F. Hurley is interested.

Holly Springs—Cotton Mill.—The city will probably decide by a popular vote whether or not to issue bonds to take \$50,000 of stock in a cotton mill.

Magnolia—Lumber Mill.—Enoch Bros. have lately added machinery to their lumber mill near Magnolia.

Meridian—Cotton Compress.—Parties have secured a site and ordered machinery to erect a Morse cotton compress.

Natchez—Electric Light Plant.—J. H. Andrews, representing the Van De Poels Electric Manufacturing Co., of Chicago, Ill., previously reported as negotiating to erect a plant, has, with Charles T. Chamberlain, J. A. Dicks and others, organized the

Citizens' Electric Light Co. to erect the plant.

Okolona—Church.—The Baptists will shortly begin work on a new church.

Scranton—Railroad.—The Waynesboro, Pascagoula & Gulf Coast Railroad Co., previously reported, have organized with J. R. S. Pitts as president; M. M. Evans, vice president; P. K. Mayer, secretary, and A. Blamer, treasurer. The road is projected from Waynesboro to the Gulf Coast.

Yazoo City—Oil Mill.—The Yazoo Oil Works (cotton-seed) have been improved at a cost of \$11,000.

Yazoo City—Transportation.—The Yazoo & Tallahatchie Transportation Co., capital stock \$50,000, has been chartered by S. H. Parisot, M. S. Parisot, Henry Marx and others.

Water Valley—Railroad, &c.—F. M. Abbott, J. H. Brinker and R. C. Becker have chartered the Southern Construction & Development Co.

NORTH CAROLINA.

Burgaw—Railroad.—George A. Ramsay, previously reported as building a railroad from Burgaw to Jacksonville, 28 miles, has, with others, formed the Burgaw & Onslow Railroad Co.

Clinton—Factories.—One or more factories are projected, and will probably soon be started.

Davidson County—Gold Mine.—The Hedrick gold mine is to be opened by Philadelphia (Pa.) parties. It is said they will sink two shafts.

Fayetteville—Cotton Mill.—John P. Thomson, president Fayetteville Cotton Mills, now being built, will shortly go North to purchase an outfit of machinery for said mills.

Forest City—Cotton Mill.—W. C. Chesler, of Mooresboro, has received the contract to erect the building for the Forest City Cotton Mill, previously reported. Machinery for the mill is reported as purchased.

Manchester—Saw Mill.—A saw mill has been erected near Manchester by C. W. Huske.

Randolph County—Copper Mining.—Parties are preparing to mine for copper at the Lentz mine.

Rockingham—Warehouse.—A large brick warehouse will be built by Ledbetter Bros.

Selwood—Spoke and Handle Factory.—B. L. Dreher contemplates starting a factory for manufacturing spokes, rims, hubs, axe and shovel handles, &c., and wants information as to the kind and cost of necessary machinery.

Statesville—Saw Mill.—G. W. Reed will add some wood-working machinery to his saw mill.

SOUTH CAROLINA.

Anderson—Hall.—The Masons will build a hall to cost \$15,000.

Charleston—Electric Light Plant.—The Charleston Electric Light Co. contemplate soon enlarging their plant.

Charleston—Bridge.—The Sea View City Railway Co. have commenced work on their bridge previously reported to be built to Sullivan's Island.

Charleston—Manufactory.—F. W. Dawson, J. L. Weber, J. C. Hemphill, J. K. Blackman and W. Bayard Simons have chartered the Carolina Typographic Co., capital stock \$10,000, to manufacture and deal in machines for setting type, &c.

Clifton—Electric Light Plant.—The Clifton Cotton Mill Co. will put electric light machinery, with a capacity for 600 lights, in their No. 1 mill.

Pacolet—Cotton Mills.—It is reported that a cotton mill to cost \$100,000 is projected.

Summerville—Street Railroad.—J. H. Averill, Henry Card and others, reported last week as to build a street railroad, will

begin work as soon as the Summerville Hotel Co. decide on the location for the hotel to be built by them. The road will be 4½ miles long.

TENNESSEE.

Chattanooga—Water Works.—Robert Morrison and others, reported last week as to build a system of water works to supply East Lake and other suburbs, have incorporated as the Spring Lake Water Co.

Chattanooga—Furniture Factory.—The Chicago Woven Cord Furniture Co., of Chicago, Ill., are negotiating to establish a branch factory.

Chattanooga—Brass Foundry.—A brass foundry is being built by William Moffett.

Chattanooga—Lumber Mill.—The Hughes Lumber Co. have commenced work on their new planing mill previously reported.

Chattanooga—Iron Foundry.—Thomas Evans and others are building an iron foundry.

Cumberland Furnace—Railroad.—The Drouillard Iron Co., of Nashville, reported last February as contemplating building a railroad, have commenced work. It will extend to the line of the proposed Clarksville & Dickson Railroad.

Ebenezer—Flour Mill.—J. P. Fulkerson is thinking of remodeling his flour mill to the roller system.

Henderson—Railroad.—A railroad is projected from Henderson via Bolivar to the Tennessee Midland Railroad at or near Whiteville. J. S. White can give information if anything is done.

Iron City—Saw Mill.—Junk Bros. will enlarge their saw mill at Wades' Hollow, 3 miles from Iron City.

Iron City—Shingle Mill.—J. F. Porch will add shingle machinery to his lumber mill.

Jackson—Gin.—White Bros. are erecting a gin at their planing mill.

Jackson—Jail.—Proposals for remodeling the jail, as reported last week, and building new iron cells, &c., will be received until August 10 by F. C. Long.

Jackson—Railroad.—The Tennessee Midland Railroad Co. (office, Memphis) have ordered the building of a 50-mile extension of their railroad to the Tennessee river. J. L. Wisdom & Co., as stated last week, have commenced work on the first five miles.

Jackson—Electric Light Plant.—H. C. Jackson, representing the Westinghouse Electric Light Co., of Pittsburgh, Pa., is negotiating to erect a plant.

Kingston—Railroad.—Edward Shelley, of Newberne, Va., previously reported as organizing a company to build a railroad to Emory Gap, states that work will commence by August 15.

Knoxville—Handle Factory.—L. C. Carter contemplates erecting a handle factory and wants to purchase machinery.

Nashville—Sewer.—G. H. Harris & Co. have been awarded the contract to build the Mallory street sewer at \$5 607.60.

Nashville—Tooth-pick Factory.—The Southern Excelsior Co. will put in additional machinery for manufacturing tooth-picks and cigar lighters.

Nashville—Factory.—William Morrow, W. L. Waters, H. W. Butterff, G. C. Waters and J. H. Fall have chartered the Waters Manufacturing Co., to manufacture articles from wood and iron.

South Pittsburg—Pipe Works.—The South Pittsburg Pipe Works have completed a second pit and will build a third pit. Are manufacturing 35 tons of pipe daily at present.

Tallahoma—Cooperage Works.—The Yost Manufacturing Co. are building an addition to their cooperage works.

Tallahoma—Factories.—Sims & Davis have purchased a site of 23 acres for the location of manufactories.

Tallahoma—Marble-yard.—J. P. O. Ryley, of Bellbuckle, will start a marble-yard.

Winchester—Timber Lands.—Mr. Morrow, of West Virginia, has purchased 6,000 acres of timber lands and will develop.

Winchester—Spoke and Handle Factory.—The Winchester Spoke & Handle Co. are making additions to their factory which will double the capacity.

TEXAS.

Bonham—Cotton Compress.—The name of the company reported last week as formed to erect a cotton compress and as having ordered machinery is the Bonham Cotton Compress Co. The capital stock is \$50,000, of which \$25,000 is paid up.

Bonham—Water Works.—Work will be commenced at once on the artesian wells for the water works previously reported as to be built by the city. The mayor can give information.

Brenham—Electric Light Plant.—Mr. Clyde is negotiating to erect an electric light plant.

Cisco—Soap Factory.—The soap factory reported last week has been started by Jacob Kliner & Son.

Colorado—Salt Works.—The Lone Star Salt Co. are doubling the capacity of their Tolor salt plant, building two additional brine settling tanks, each 45,000 gallons capacity, and adding a dryer.

Corsicana—Asylum.—Proposals for building the State Orphan Asylum will be received until August 10 by M. Drane. E. Northcraft is architect.

Dallas—Publishing.—The Texas Advertiser Co., capital stock \$10,000, is being organized.

Dallas—China-ware Works.—Efforts are being made to raise a bonus to secure the removal of china-ware works from Missouri to Dallas.

Dallas—Hotel.—A 100 room hotel is to be built at Oak Cliff. The Oak Cliff Land Co. can give particulars.

Dallas—Residence.—T. L. Marsalis has broken ground for a fine large residence at Oak Cliff.

Eagle Pass—Bridge.—The Rio Grande Bridge & Tramway Co. have placed their bonds and will complete their bridge at once. Contracts for the stone work are being let.

El Paso—School.—The city council will erect a school building capable of seating 200 pupils.

El Paso—Copper Works.—C. C. Fitzgerald, of New York, owner of the International Smelting Works, has organized a \$500,000 stock company to operate the works. A copper smelting plant will be added to their works, the machinery for which will soon be purchased.

El Paso—Soap Factory.—Liles & Page have started the soap factory previously reported as contemplated and now have it in operation.

Fort Worth—Building.—The North Texas National Bank have let the contract to erect a new building to S. Nelson. He has commenced work.

Fort Worth—Mattress and Bed Factory.—L. Rockel has moved his factory for manufacturing mattresses, woven wire beds, cots, &c., from Dallas to Fort Worth.

Fort Worth—Sash, Door and Blind Factory.—J. W. Fender will move his sash, door and blind factory from Terrell to Fort Worth and is now erecting a two-story building, 40x100 feet.

Fort Worth—Church.—The Sisters of St. Mary will erect a school building at St. Stanislaus Church.

Fort Worth—School.—The city will erect a school building soon. The mayor can give particulars.

Georgetown—Saw Mill and Box Factory.—It is reported that Barbour & Co. are building a saw mill and box factory.

Jefferson—Iron Works, &c.—J. H. Balfston, who has been making investigation of the iron ores at and near Jefferson for Chicago (Ill.) parties who are reported as contemplating building an iron furnace, &c., has made a favorable report.

Jefferson—Woolen Mill.—H. Rives, previously reported as adding machinery for manufacturing woolen yarns to his cotton mill and as contemplating enlarging if successful, will later in the year put in machinery to double his capacity and to manufacture woolen goods.

Laredo—Car and Machine Shops, &c.—The Mexican National Railroad Co. will build large car and machine shops to cost about \$600,000 and are negotiating for 3,000,000 brick. 100 houses are reported to be erected for the employees.

McKinney—School.—Proposals for building a school will be received until August 5 by John Church.

Paris—Lumber Mill.—Henley & Ramsour have lately added some machinery to their lumber mill.

Paris—Church.—The Methodists have commenced work on their \$20,000 church, previously reported.

Paris—Railroad.—The Paris, Marshall & Sabine Pass Railroad Co. will issue \$8,000,000 of bonds (\$20,000 per mile) to build their road.

Rockdale—Water Works.—Water works are talked of.

San Angelo—Laundry.—A steam laundry is to be started soon.

San Angelo—Ice Factory.—The ice factory at Colorado is to be moved to San Angelo.

San Antonio—Machine Shops, &c.—The Southern Pacific Railroad Co. are enlarging their machine shop and roundhouse.

San Antonio—Hotel.—The Menger Hotel Co. has been incorporated.

Sweetwater—Mill and Gin.—The Sweetwater Mill & Gin Co. has been chartered.

Waxahachie—Water Works.—The city council will issue \$30,000 of bonds to build the water works referred to last week. A. E. Dubose and J. F. Strickland have been appointed a committee to visit other cities and report as to a system.

Waxahachie—Ice Factory.—The Waxahachie Ice Co. will put in some new machinery to increase their capacity.

Wichita County—Brick-yard, &c.—D. C. Kolb, room 4, Rollins Block, Des Moines, Iowa, reported last week as, with others, to settle a colony, lay out a town, build hotel, &c., will also start a brick-yard.

VIRGINIA.

Allisonia—Iron Mining.—The Virginia Steel Co. will develop the iron ore land previously reported as leased by them, and will erect ore washers. They are building a railroad ¼ mile long.

Lynchburg—Water Works.—The Holly Manufacturing Co., of Lockport, N. Y., have been awarded the contract to furnish the new pump for the water works, previously reported, at \$21,200. The capacity will be from 2,000,000 to 3,000,000 gallons daily.

Lynchburg—Cotton Mill.—The Lynchburg Cotton Mill & Improvement Co. have decided on a location for their cotton mill, previously reported, and will begin work at once.

Lynchburg—Bridge.—The Norfolk & Western Railroad Co. (office, Roanoke) are preparing to erect a new (iron) bridge over the canal.

Max Meadows—Iron Furnace.—The Walton furnace, owned by the Lobdell Car Wheel Co., of Wilmington, Del., will be put in blast about September 1.

Norfolk—Warehouse.—Swift & Co., of Chicago, Ill., have leased a warehouse, and will spend about \$7,500 in fitting it up as a cold storage warehouse.

Norfolk—Lumber Mill, &c.—The Tunis Lumber Co., reported last week as erecting a kindling wood mill and to erect a sash, door and blind factory, will spend \$100,000 in enlarging their plant.

Norfolk—Belgian Blocks.—Proposals for furnishing the city with 3,000 tons, more or less, of Belgian blocks will be received until August 3 by Adam Treadwell.

Petersburg—Tobacco Factories.—Several tobacco factories are reported to be built soon.

Petersburg—Peanut Factory.—Morris, Levy & Co. will enlarge their peanut factory and have let the contract to W. T. Chapell.

Portsmouth—Bank.—The Bank of Portsmouth will receive bids for remodeling their bank building.

Pulaski City—Pipe Works.—Pipe works are reported to be built. The Pulaski Land & Improvement Co. can probably give information.

Richmond—Theatre.—A theatre is to be built. W. W. Putnam can give particulars.

Richmond—Phosphate Works.—The Pamunky Marl & Phosphate Co., capital stock \$20,000, has been organized to mine and manufacture marl, phosphates, etc. Ashton Starke is president, and J. L. Hill, secretary and treasurer.

Roanoke—Electrical Railroad.—The street railroad previously reported as to be built by the Roanoke Street Railroad Co. will be operated by electric power.

Roanoke—School.—The contract for the brick work of the school building previously reported as to be erected has been let to J. H. Earnin & Son at \$4,230, and the contract for all other work to Lexington Manufacturing Co., of Lexington, at \$5,078.50.

WEST VIRGINIA.

Charleston—Bank.—Henneman Bros. have received the contract to erect a bank building to cost about \$10,000.

Charleston—Scale Factory.—G. W. Craig, J. D. Baines, J. C. Roy, S. D. Cox, Frank Woodman and others have chartered the Craig Scale Co. to manufacture and sell scales. The capital stock is \$50,000, of which \$5,000 have been subscribed.

Fairview—Jail.—Hancock county contemplates building a new jail.

Handley—Coal Mining, &c.—The Coal-dale Coal Co., reported last week as incorporated, own 40,000 acres of good coking and cannon coal, which they will develop. Will manufacture coke also. W. H. Straughan is president.

Raymond City—Coal Mine.—Thomas B. Bancroft will develop a coal mine.

Rowlesburg—Iron Bridge.—The Baltimore & Ohio Railroad Co. (office, Baltimore, Md.) will build a new iron bridge over the Cheat river near Rowlesburg.

Short Creek—Brick Works.—Hopley & Bane, lately mentioned as to start brick works to cost \$5,000, will establish them at Short Creek.

Spencer—Hospital.—Proposals for excavating for and building the foundations of a hospital will be received until August 13 by Henry S. Walker, of Charleston.

Wheeling—Iron Furnaces.—The Wheeling Iron & Nail Co. are relining and improving their iron furnace.

BURNED.

Desotville, Ala.—The mill of J. S. Taylor.

Gilmer, Texas.—The dry kilns of McLearn Bros., near Gilmer.

Ingersoll, Texas.—The saw mill of W. T. Fagan; loss \$15,000.

Louisville, Ky.—The roofing works of Charles H. Connor; loss \$15,000.

Sorrento, Fla.—The saw mill of Mr. Wadsworth.

Tifton, Ga.—The planing mills of H. H.

Tift; loss \$25,000. Will probably be rebuilt.

Tuskaloosa, Ala.—The saw mill of J. Snow.

Building Cotton-Mill.

DALLAS, GA., July 17, 1888.

Editor Manufacturers' Record:

We are putting up a mill of 3,000 spindles, and we are to run 80 looms to commence on. We will be running by October 1, 1888. I am the principal stockholder, and own two-thirds of the stock.

G. W. HOWELL.

Increasing Capacity Pipe Works.

SOUTH PITTSBURG, TENN., July 18, 1888

Editor Manufacturers' Record:

The South Pittsburg Pipe Works have completed a second pit, and are intending to build a third, as they are so far behind with orders. They are now making 35 tons of pipe per day.

The Perry Stove Manufacturing Co. will begin operations next Monday in their temporary quarters, giving employment to 250 men.

F. P. CLUTE.

Building Gin Factory.

FLORENCE, ALA., July 20, 1888.

Editor Manufacturers' Record:

The Coleman Cotton Gin & Cleaner Co., capital \$50,000, has been organized and commenced work on buildings.

The Florence Building Association has been organized with a capital of \$50,000; stock all taken. Will erect 50 houses this summer.

W.

To Build Water Works.

PHILADELPHIA, PA., July 21, 1888.

Editor Manufacturers' Record:

I have received contract to build water works in Bristol. Will commence at once. Finish before December 1, 1888. Goodson, across the line, in Virginia, will doubtless agree to same terms as Bristol. If so, works will be built there same time.

W. W. TAYLOR.

Improving Gas Works and Adding Electric Light Plant.

PARIS, TEXAS, July 19, 1888.

Editor Manufacturers' Record:

Our improvements will consist of new holder, 50x16 feet, two bunches of threes, seven miles of mains, all ordered, and an incandescent 650-light plant. Cost will be about \$25,000.

PARIS GAS & ELECTRIC LIGHT CO.

Enlarging Works.

PETERSBURG, VA., July 19, 1888.

Editor Manufacturers' Record:

We are enlarging our guano works.

DAVE & WHITTLE.

Street Railroad and Hotel to be Built.

SUMMERVILLE, S. C., July 23, 1888.

Editor Manufacturers' Record:

It is contemplated in the near future to build a belt road in our town; said road to be about 4½ miles long, to be laid with 25 or 30-pound steel rails, and to be operated by steam.

Summerville has a considerable reputation as a summer resort for citizens of Charleston, and would be a popular winter resort for Northern invalids seeking health and comfort if it could offer hotel accommodations; this we are about to do. A 100-room hotel in the modern style is to be erected, and when erected and ready for occupancy, will be kept in a first-class manner. The building of the hotel is the cause of the railroad project, which, it is thought, will be a very paying one.

J. H. AVERILL, Pres.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Boiler and Engines.—Walter T. Forbes, Atlanta, Ga., wants to purchase boilers and engines.

Bridge.—O. N. Wilds, Natchez, Miss., will receive until August 8 proposals for building a new bridge over the Spanish Bayou.

Cotton Machinery.—Malloy & Morgan, Statesville, N. C., want estimates on new and second-hand machinery for a 2,500-spindle mill.

Creamery.—Information as to the cost of machinery for a creamery with a daily capacity of 500 pounds is wanted by C. G. Davis, Bristol, Tenn.

Crushing Machinery.—The Gerber Specific Co., Ocean Springs, Miss., want to purchase machinery for grinding and pulverizing oyster shells, rock, &c.

Engine and Boiler.—The Huntington Electric Light & Street Railway Co., Huntington, W. Va., J. C. Caldwell, secretary and treasurer, want to purchase an engine and boiler, automatic, from 75 to 125 horsepower, with all the latest improvements, for running electric machinery for their electric street railway; must be nearly as good as new. Terms cash when the machinery is delivered f. o. b.

Grist Mill and Gin.—Folmar & Sons, Troy, Ala., want to buy a good size grist mill and one or two 80-saw gins.

Handle machinery is wanted by L. C. Carter, Knoxville, Tenn.

Ice Machinery.—C. G. Davis, Bristol, Tenn., wants information as to the cost of machinery for a 10-ton ice factory.

Sewers.—Proposals for building terra cotta pipe sewers, concrete sewers and receiving basins at Washington, D. C., will be received until August 7 by the District Commissioners.

Spoke and Handle Machinery.—B. L. Dreher, Selwood, N. C., wants information as to the kind and cost of machinery for manufacturing spokes, rims, hubs, axe and spoke handles, &c.

Steam Heater.—W. G. Christopher, West Point, Ga., wants to purchase a cheap steam heater for a small building to cost not more than \$50.

Stump Puller and Grub Plow.—William Felker, Coal Hill, Ark., wants to purchase a stump puller and grub plow.

Water Tank, Piping, &c.—The Farmers' Co-operative Manufacturing Co., Tarboro, N. C., want to purchase a 10,000-gallon water tank, piping and steam pump for fire protection; also bags for meal and seed, and barrels for oil.

Water Works.—Proposals for building water works at Lebanon, Ky., will be received until August 1 by A. Offutt. The capacity of reservoir is to be 1,250,000 gallons.

Wood Chippers.—R. Manzy, Staunton, Va., wants the address of manufacturers of wood chippers.

Smelting Works for Anniston.

BIRMINGHAM, ALA., July 23, 1888.

Editor Manufacturers' Record:

The Southern Smelting, Reduction & Mining Co. will erect smelting works at Anniston, Ala., for reduction of gold-bearing sulphurets, copper and other ores. Will put in \$25,000 plant. Work to begin at once. ALFRED R. LIGHTFOOT, Pres.

Paint Works.

WILMINGTON, N. C., July 17, 1888.

Editor Manufacturers' Record:

We are erecting works for the manufacture of ready mixed paints at our plant on west side Cape Fear river. Will manufacture ready mixed paint of all colors, and expect in a few days or by the 25th inst. to put our goods upon the market.

W. A. MARTIN & Co.

To Start Brick Works.

SHORT CREEK, W. VA., July 18, 1888.

Editor Manufacturers' Record:

We are going to erect brick works to cost \$5,000, and will manufacture a paving brick from red clay which will be heavier in proportion, denser and better in all respects than the paving brick made of fire-clay.

HOPLEY & BANE.

Erecting Bobbin Mill.

AUGUSTA, GA., July 30, 1888.

Editor Manufacturers' Record:

I am erecting a bobbin mill with a capacity of 8,000 bobbins per day in this city.

MATTHEW RICE.

To Build Flour Mill.

ALONE, KY., July 18, 1888.

Editor Manufacturers' Record:

It is my intention to build a short system roller mill of one or two breaks, and with capacity of from one to two barrels of flour per hour. I want as cheap an outfit as possible, with as good results as can be had for a small sum of money.

C. G. CLARK.

HANDLEY, W. VA., July 20, 1888.

Editor Manufacturers' Record:

Myself and others have formed the Coal-dale Coal Co. to operate coal, coke, iron, etc., at Handley. We have 40,000 acres of good gas, steam, splint, coking and cannon coal, and expect to do an extensive business in the near future.

M. H. STRAUGHAN.

Cotton Yarns and Warps.

Single skeins:	
5s to 10s.....	15¢ to 25¢
12s to 20s.....	18¢ to 28¢
20s to 30s.....	22¢ to 32¢
30s.....	25¢ to 35¢
40s.....	28¢ to 38¢
5-ply 8s, skeins.....	16¢ to 26¢
" 10s, ".....	18¢ to 28¢
" 12s, ".....	20¢ to 30¢
" 14s, ".....	22¢ to 32¢
" 16s, ".....	24¢ to 34¢
" 18s, ".....	26¢ to 36¢
" 20s, ".....	28¢ to 38¢
" 22s, ".....	30¢ to 40¢
" 24s, ".....	32¢ to 42¢
" 26s, ".....	34¢ to 44¢
" 28s, ".....	36¢ to 46¢
" 30s, ".....	38¢ to 48¢
3, 4 and 5-ply 8s.....	16¢ to 26¢
Soft twist, single skeins:	
5s to 10s.....	16¢ to 26¢
12s to 20s.....	18¢ to 28¢
20s to 30s.....	22¢ to 32¢
30s.....	25¢ to 35¢
40s.....	28¢ to 38¢
Single chain warps:	
100.....	16¢
120.....	18¢
140.....	20¢
160.....	22¢
180.....	24¢
200.....	26¢
220.....	28¢
240.....	30¢
260.....	32¢
280.....	34¢
300.....	36¢
Two-ply chain warps:	
120.....	18¢
140.....	20¢
160.....	22¢
180.....	24¢
200.....	26¢
220.....	28¢
240.....	30¢
260.....	32¢
280.....	34¢
300.....	36¢

New York and Philadelphia quotations furnished by Buckingham & Paulson, 83 Leonard street, New York; 215 Chestnut street, Philadelphia, and Exeter Place, Boston.

JULY 24, 1888.

BANKERS AND BROKERS.

WILSON, COLSTON & CO. Bankers & Brokers

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Investment and Miscellaneous Securities a specialty, and large lines handled. Exceptional facilities dealt in all classes of Southern Bonds. Loans on Collateral Securities negotiated. Quotations information furnished on application, and correspondence invited.

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PORTLAND CEMENT.

German and English Brands of Best Quality.

Send for tests and all particulars to
ERSKINE W. FISHER,
WELLS BUILDING, No. 18 Broadway, NEW YORK.

Cotton and Woolen MACHINERY.

80 Crompton Fancy Cotton Looms, nearly new, 36 inch reed space, for 13 Harnesses, 4 boxes at one end, 1 at the other.

My Store Houses here have over 2 ACRES of storage, which is covered with good machinery, including nearly full systems for Cotton and Woolen Mills.

■ **JEREMIAH CLARK,** ■
Lowell, Mass. Office, 108 Middle St.

For Sale at a Bargain!
ATLANTA, GA.

Machine Works and Foundry.

The above popular works are embraced in nearly two acres of land, only 500 yards from the center of Atlanta, fronting on Hunter and King streets, and the Georgia Railroad, with spur tracks running into the grounds. Largest works in Atlanta, commanding the trade of the entire South. The most complete plant for manufacturing every variety of machinery, with many specialties, the demand for which is increasing daily. An endless variety of valuable patterns. Buildings substantial brick, with metal roofs. Large contracts awaiting the resumption of these works. A rare opportunity is offered for making money to a party purchasing. A bargain will be given and easy terms. For particulars address **A. E. BUCK, Receiver.**

FOR SALE.

A "B" SULLIVAN

Diamond Drill

CAPACITY 2,000 FEET,

With 500 to 1,000 feet of rods,

ALSO, A SPECIAL

Duplex Blake Pump,

6x3x7.

The Diamond Drill has only been in use three months. Will be sold at a reduced Price.

ADDRESS

W. C. DIBRELL, Sec'y,

BON AIR COAL CO.

Nashville, Tenn.

Second-hand Machinery in Good Order

FOR SALE CHEAP.

Engine Lathes—34 in. x 20 ft.; 28 in. x 14 ft.; 24 in. x 12 ft.; 1 each 24 in. x 20 in. and 24 ft.; 24 in. x 12 ft. bed, Field; 24 in. x 15 and 16 ft.; 28 in. x 20 ft.; 24 in. x 10 and 12 ft.; 18 in. x 10 ft.; 20 in. x 10 ft.; 20 in. x 12 ft.; 1 each 16 in. x 6, 8 and 10 ft.; 6 each 14 in. x 6 ft.; 1 12 in. x 5 ft.; 4 each 15 in. x 6 ft.; 2 each 12 in. x 4 ft. and 5 ft.; 1 10 in. x 3 1/2 ft., foot power.

1 Brain Turned Lathe.

1 Planer, 24 in. x 24 in. x 5 and 8 ft.

1 Planer, 30 in. x 30 in. x 8 ft.

1 Planer, 36 in. x 30 in. x 7 ft.

1 Planer, 40 in. x 40 in. x 7 ft.

1 Screw Planer, 18 in. x 3 ft.

1 Shaper, 6-in. stroke. 1 12-in. Shaper, two tables

1 each 12, 15, 20 and 28 in. stroke.

1 12-in. Hendey Shaper.

1 Crank Planer, 6 Lincoln Pat. No. 2 Millers.

1 each 2 and 6 Spindle Gang Drill.

1 each No. 1 and 2 Screw Machines. Wire Feed

Pratt & Whitney. Good as new.

375-lb. Drop Hammer. Beecher & Peck.

400-lb. Merrill Drop Hammer.

1 each 40 & 60 lb. Vertical Hammers.

No. 53 Ferracute Press. 1 Nut-Facing Machine.

No. 53 Siles Geared Press.

10 Foot Presses, assorted. 8 Power Presses, assorted.

1 Punching and Shearing Machines, assorted.

Return Tubular Boilers, 35 H.-P.

National Bolt Cutter, sizes, 1/4 in. to 1 in.

Bolt Cutter, 1/4 in. to 1 1/4 in. Good order. A J

head, Merriman.

Bolt Cutter, 1/4 in. to 1 in. Adj. head. Sellers.

each No. 2 & 3 Garvin Hand Millers. Good as new

Horizontal Engine each 25 and 45 H.-P.

each 4 and 8 H.-P. Portable Engine.

1 Spindle Profiling Machine.

Horizontal Boring Machine, 36 in. x 6 ft.

No. 25 Siles & Parker Presses.

36-in. Hand Saw. Rogers.

Power Mortising Machine.

Also full line of New Machinery.

New York Agency TAYLOR MFG. CO., Engines,

and etc. Correspondence solicited.

FRANKLIN TOOL AND SUPPLY CO.,

P. O. Box 331. No. 42 Dey St., New York City.

GEORGE PLACE,

Established 1855.
Late the George Place Machinery Co.

Equipment of Railway and Car Works,

EQUITABLE BUILDING,

120 Broadway. NEW YORK.

STEEL RAILS

COMPLETE OUT-FIT FOR

Logging, Mining and Plantation

RAIL AND TRAM ROADS.

Light Sections Rails and Spikes in stock.

Locomotives, Logging Cars, etc.

NEW AND SECOND HAND.

HUMPHREYS & SAYCE,

10 WALL ST., NEW YORK.

FOR SALE.

Railway - Equipment.

14 Excursion Cars, in good repair, re-

paired Pullman, color and lettered to suit.

Nearby immediate delivery.

16 Passenger Cars, all that remain of 70,

on hand beginning of season.

Locomotives, entirely rebuilt, good as new.

We have Passenger, Freight, Mogul, Switching

and Motor Patterns for immediate delivery.

Freight Equipment of standard and

narrow gauge, in great variety.

NEW YORK EQUIPMENT COMP'Y

10 WALL STREET.

JAS. IRVING, JOS. D. MITCHELL, L. V. WALKLEY,

President. Vice-Pres. and Treas. Secretary.

FOR SALE.

200 tons 56-pound T rail fit to relay.

125 tons 16s.

3 Standard Gauge Locomotives.

5 Narrow Gauge Locomotives.

30 Logging Cars.

35 Construction Cars.

2 Air Compressors.

3 Rock Crushers.

1 Steam Street Roller.

T. William Harris & Company,

EQUIPMENT AND SUPPLIES,

44 & 46 Broadway, NEW YORK.

For SALE or Rent

THE PATAPSCO COTTON FACTORY,

On the Patapsco river, near Ellicott City, about

9 miles from Baltimore, with about 36 ACRES

of LAND and 24 DWELLINGS for employees.

Main Building 4-STORY AND ATTIC, with all

necessary machinery and appliances for im-

mediate operation. FULL SUPPLY OF WATER

FROM THE RIVER DAM.

This fine plant can be made available for any

kind of manufacturing industry at moderate

expense. For further particulars and permit

of inspection, apply to

WM. C. PENNINGTON,

President Gray Manufacturing Co.,

8 W. corner South and Water Streets,

BALTIMORE, MD.

FOR SALE.

A Splendid Saw Mill Location and

Five Million Feet of Timber.

Four Million Feet of Cypress and One Mil-

lion Feet of Pine.

Located at Epes' Station, a point where

the A. G. S. R. R. crosses the Tombig-

bee river, and is above 100 miles distant

from Birmingham. Timber commences

on bank of river and none over one-half

mile distant. River navigable about Epes'

Station for 150 miles for boats. Lumber

can be transported by either railroad or

river. Enough cypress, pine, white oak,

hickory, ash, gum, poplar and beech to

last a good mill 20 years. Can be bought

for \$5,000, one-half cash, balance on time.

Address **TIMBER,**

Care MANUFACTURERS' RECORD.

FOR SALE Cotton & Woolen Machinery,

In full lines for both plain and fancy manufac-

turing in all departments, in stock. Also for

Bleaching, Dyeing and Printing. Engines,

Boilers, Tools and Supplies.

W. SEABURY SIMMONS,

92 Chambers Street, New York.

COAL and IRON

Properties located in the best fields of

Alabama and Tennessee FOR SALE.

Finest timber tracts in the South and

West. Data furnished. Ask for what

you need.

CLARKE & BIBB,

BANKERS AND BROKERS,

18 Broadway, New York.

FOR SALE.

1 36-in. 1 Beater Breaker Lapper. } English.

1 36-in. 1 Beater Finisher Evenar. }

1 36-in. 3 Beater Kitson, with preparator.

1 36-in. 3 Beater, Whiting's.

1 36-in. 3 Beater, Whiting's.

1 30-in. 2 & 3 Beater, Whiting's.

1 30-in. Walman Stripper, Whiting's Cards.

1 30-in. Walman Stripper, Saco Water Power.

1 30-in. Walman Stripper, Whiting's.

For further particulars apply to

L. GODFREY & CO.
PROVIDENCE, R. I.

**Lake Chautauqua Route**

From the SOUTH and WEST to the EAST.

PULLMAN LINE

TO ALL POINTS ON

LAKE CHAUTAUQUA

AND TO NEW YORK.

ASK FOR TICKETS VIA

ERIE RAILWAY

Descriptive Pamphlets mailed free on application.

E. B. Thomas, ed V. Prest; L. P. Farmer, Gen. Pass. Agt.

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IT WILL PROVE

To investigate the proven merits of

THE HARRISON SAFETY BOILER

Before purchasing your steam plant.

Address, Harrison Safety Boiler Works, Southern 2 & 4 S. Pryor St.

Philadelphia, Penna. Office, 2 & 4 S. Pryor St.

TO YOUR INTEREST

THOMAS V. HALL, M. E. Consulting Engineer.

A. S. CORRELY.

THOMAS V. HALL & CO. CONTRACTORS

FOR THE FULL EQUIPMENT AND CONSTRUCTION OF

Ice Manufacturing and Cold Storage Plants.

Water Works on the Holly Reservoir or Stand Pipe System.

Incoandescent and Arc Electric Light Plants. Fruit and Vegetable

Canning Factories on the Matthews Patent Rapid Process System.

Hand, Steam and Hydraulic Passenger and Freight Elevators.

OFFICE: Correspondence Solicited. Send for Estimates.

Room 23 Montague Block, S. E. Cor. Eighth and Chestnut Streets, CHATTANOOGA, TENN.

SMITH'S PATENT.

J. A. V. SMITH,
MANCHESTER, N. H.

MANUFACTURER OF

Steel Speeder Fliers.

One of the oldest manufacturers of Steel Speeder Fliers in the business having centrifugal and spring pressure, and the sole proprietor of certain indispensable improvements that can be procured nowhere else. Those about to erect mills or put in new machinery, will find it to their advantage to write for information.

THE PRICE IS LOWER THAN OTHERS.

SMITH'S PATENT.



Hill Clutch Works,
Cleveland, O.

HILL
Friction
Clutch.



ROANOKE CITY, VA.

POPULATION 1881, 400.=====

=====POPULATION 1888, 12,000.

Roanoke City is located in the mountains of Virginia, 1,000 feet above sea level—between the Blue Ridge range on the east and Alleghany range on the west.

It has an elegant Courthouse, Market-House, Opera House, Public School Houses, Firemens' Hall and many other public buildings.

Has a Gas Company with a capital of \$120,000.

Has an Electric Light System, both arc and incandescent—in course of construction.

Has a system of Water Works, the finest in the State, worth \$250,000.

Has 12 churches, representing nearly every denomination.

Has four banks, operating on an aggregated capital of \$450,000.

Is the headquarters of the Norfolk & Western Railroad Company, which employs 300 clerks.

Is the headquarters of the Shenandoah Valley Railroad, which employs 75 clerks.

Is the headquarters of the Pocahontas Coal Company, the largest coal operators in the world.

Is the headquarters of the Virginia Steel Company, which is backed by \$5,000,000 in cash.

Is the headquarters of the Virginia Company, operating on a large capital.

Is the headquarters of the Washington & Western Railroad Company.

Is the headquarters of the Virginia Mineral Railroad Company.

Is the headquarters of the Roanoke & Southern Railroad Company—now under construction.

Has a large wholesale and retail trade, embracing sixteen of the most productive counties in the Old Dominion, and its wholesale trade extends into West Virginia, Tennessee and North Carolina.

Has the most delightful and healthiest climate in the world.

Has, within fifty miles of it, a dozen of the most famous watering places in America.

Has The Crozer Steel & Iron Company, operating on a capital of \$500,000, employing 300 men, and turning out 120 tons of pig iron per day.

Has the Roanoke Machine Works, with a capital of \$1,000,000, and employing 1,000 men.

Has the Roanoke Rolling Mill, with a capital of \$150,000—in course of erection.

Has a Roller Flouring Mill, valued at \$15,000.

Has the Diamond Ice & Refrigerator Company, capital \$25,000.

Four Planing Mills, with a capital of \$25,000.

The railroads and various manufacturing enterprises of Roanoke have monthly pay rolls aggregating \$150,000, all of which is paid to citizens of Roanoke.

Has four hotels capable of accommodating 500 guests; Hotel Roanoke cost \$80,000.

375 houses were erected in Roanoke City during 1887, and at least 800 will be erected during 1888. There are at present 200 buildings under construction.

The bonded debt of Roanoke City is smaller than that of any city in the South of equal size, being less than \$150,000. The city tax rate is \$1.10 on the hundred dollars—lighter than that of any city in the South.

Roanoke City will spend, during 1888, \$16,000 for public school buildings; \$25,000 for sewerage; \$25,000 for streets, and about \$15,000 for miscellaneous public improvements.

An Opera House Company has been chartered and will erect a \$50,000 theatre building.

The Roanoke Street Railway & Transportation Company has been chartered and will construct three miles of street railway.

The Home Building & Conveyance Company has been chartered and are now building and preparing plans for 100 residences.

Has the Roanoke City Mills, capital \$20,000.

Trade of Roanoke has increased 300 per cent. during the past three years.

1,000 miles of railroad now in operation, focus at Roanoke.

Roanoke is 258 miles west of Norfolk, and 150 miles east of Bristol, on the Tennessee line.

The only city of any consequence within 200 miles of Roanoke is the city of Lynchburg, by the James.

Roanoke is the supply depot for a territory embracing 16 counties in Virginia and many of the border counties of West Virginia, Tennessee and North Carolina.

Roanoke is the headquarters of nearly all the mining companies now operating in the Southwest.

Has the largest fruit and vegetable canning factory in the South, with a capacity of 15,000 cans per day.

Has the Roanoke Land & Improvement Company, operating on \$600,000 capital.

Has four Building and Loan Associations, capital \$350,000.

Has the Roanoke River passing along its borders, furnishing unsurpassed water power for manufacturing purposes.

Has more undeveloped mineral wealth within easy reach than any city in the South.

Roanoke will soon be the terminus of two divisions of the Norfolk & Western Railway system, thus adding 1,500 to its population.

Roanoke is building a Masonic Temple to cost \$25,000, and a Y. M. C. A. building to cost \$20,000.

Real estate is from 100 to 200 per cent. cheaper in Roanoke than in any city of promise in the South.

Roanoke will have a population of 25,000 souls when the census of 1890 is taken.

We want men of money and men of muscle.

Has the West End Land Co., operating on a capital of \$40,000, paid up.

ATHENS, East Tennessee,

THE COMING

→ Iron and Manufacturing City of the South. ←

Athens is the county seat of one of the most fertile counties in East Tennessee. The health of the city is unsurpassed, and is **ABSOLUTELY FREE FROM ALL MALARIAL OR EPIDEMIC DISEASES**. The surrounding scenery is very fine. From the main avenue the whole valley of East Tennessee can be seen, from the Cumberland Mountains on the west to the Great Smoky Mountains on the east; some of the tallest peaks east of the Rockies being in full view. FINE MINERAL SPRINGS are adjacent and are popular summer resorts. The society of Athens is excellent. A cordial welcome is extended to all law-abiding people locating in the town. The EDUCATIONAL FACILITIES are good. Beside public and preparatory schools, Athens is the seat of **THE GRANT MEMORIAL UNIVERSITY**, which has an enrollment of over 300, and whose graduates include some of the most distinguished citizens in the country. Among the industries and institutions of the place in active operation are:

THE ATHENS BUILDING & LOAN ASSOCIATION, \$250,000. THE ATHENS WOOLEN MILLS, \$100,000

THE FIRST NATIONAL BANK, \$50,000.—To be increased at once.

FOUNDRY & MACHINE SHOPS, \$25,000.

FURNITURE WORKS, \$15,000.

FLOURING MILLS, \$20,000, etc.

500 men are now at work on the new railroad from Athens to the

RICHEST IRON FIELDS IN THE SOUTH.

JUST EAST OF THE TOWN.

Only eight miles from Athens are **VEINS OF RED FOSSILIFEROUS ORE 11½ FEET THICK**, and 4 to 12 miles beyond are **THE LARGEST DEPOSITS OF BROWN ORES IN THE SOUTH**. The ores of both varieties, in addition to being inexhaustible, are both superior in quality to any ores of either variety at present mined in the South. An assertion that can be sustained. Coke can now be obtained at the lowest prices, and in addition a new railroad is now projected to the Cumberland Coal Fields, only 22 miles distant. These roads will give Athens **UNSURPASSED SHIPPING FACILITIES**. The road under construction will penetrate large deposits of Tennessee Variegated Marble; also an Unopened Timbered Region, and will develop the

Largest Colored Slate Deposits in the United States.

These quarries are now being opened, and are pronounced by experts Absolutely Inexhaustible, and equal in quality to the finest Vermont Colored Slate.

The ATHENS MINING & MANUFACTURING CO.

Have alone just contracted for the erection of over

\$500,000 IN NEW MANUFACTURING ENTERPRISES

At Athens, including a 100-ton Blast Furnace, cost \$200,000; Cotton Mills, cost \$150,000; Furniture Works, employing 200 men, cost \$100,000; Hotel, cost \$60,000; Water Works, Street Car Lines, &c. These improvements have been commenced which, added to other improvements projected, will add

\$1,000,000 OF NEW MANUFACTURING ENTERPRISES TO ATHENS.

The company desire to open correspondence with parties desiring to locate, and will extend liberal inducements in addition to gifts of sites in order to induce New Manufacturing Enterprises to locate in Athens. City property is doubling in value every few months, and at present low prices is beyond question a very fine investment.

The Athens Mining & Manufacturing Company,

R. L. BRIGHT, President

R. J. FISHER, Secy. and Genl. Manager.

ROME, GA.

OF all the growing cities in the growing South, Rome presents the greatest opening for money-making investments. With surrounding fields as rich as the lands of Goshen, with exhaustless deposits of brown and red Iron Ores and Manganese immediately at hand on all sides, with mountains of Marble and Limestone coming right up to the city, with an abundance of the best Coal easy of access, areas of untouched forests and with seven railroad outlets and two navigable rivers, Rome stands, in natural advantages, pre-eminently above any other proud and pretentious city within the limits of this proud and ambitious commonwealth.

THE HEALTH OF ROME IS UNSURPASSED.

*THE UNUSUALLY LOW DEATH RATE IS A PHENOMENON,
STANDING WITHOUT A PEER AT 8.40 PER THOUSAND.*

*NOT ONE CASE OF CATARRH OR CONSUMPTION EXISTS OR
EVER ORIGINATED WITHIN HER LIMITS.*

Rome has 12,000 inhabitants, has invested in colleges and school buildings about \$300,000; in church building over \$100,000; in her new hotel \$125,000; in the dummy line, just completed, over \$50,000. Her manufactories employ 800 hands, with other enterprises now going up. Her system of water-works and sewerage is unsurpassed. The city is lighted with gas, and negotiations for an electric light plant are now pending. The highways leading to the city are all well macadamized. The Post-office Department has recently made Rome a free postal delivery office. The annual business of the city is about \$12,000,000, with the trade constantly increasing. The yearly range of temperature at Rome, between the average highest and lowest, is about 84 degrees; the mean temperature is 60.6 degrees. About seven months intervene between the first and the last killing frosts of the year. There is no better society to be found anywhere.

The Rome Land Company (J. W. Rounsaville, President, T. F. Howell, Treasurer, and J. L. Bass, Secretary and Business Manager) will donate ample grounds to, and otherwise aid, any worthy manufacturing enterprise that may locate here.

Send for circulars and pamphlets.

HOOPE & TOWNSEND.

MANUFACTURERS



**MACHINE AND CAR BOLTS,
KEYSTONE BOILER RIVETS,**

MADE IN SOLID DIES.

*COLD PUNCHED, CHAMFERED, TRIMMED &
DRILLED SQUARE & HEXAGON NUTS.*

Bridge Rivets,

WASHERS,

Split and

Tank and Coopers'

Single Keys.

RIVETS.

PHILADELPHIA, PA.

ESTABLISHED IN 1865.

Richmond Locomotive & Machine Works

RICHMOND, VA.

BUILDERS OF

LOCOMOTIVES.

Standard and Narrow-Gauge, for
for every variety of service. Pole
Road Locomotives and Cars, the only
successful device of the kind made.

Stationary and Portable

ENGINES.

12 to 300 Horse-Power.

Standard and Special, 12 to 300 horse-power.
Gas, Water, Creosoting and other heavy ma-
chinery. Catalogues, specifications, photo-
graphs and estimates furnished on application.

BOILERS.**STEEL RAILS****PENNSYLVANIA**

Standard Sections
Light Sections
Street Rails

Fish Plates,
Frogs, Switches

STEPHEN W. BALDWIN
SALES AGENT

STEEL COMPANY

50 to 80 lbs. per yard
16 " 45 " " "
30 " 88 " " "
Bolts & Nuts,
and Crossings.

NO. 2 WALL STREET
NEW YORK N.Y.

16 lbs. Full Size.

BUCYRUS FOUNDRY & MFG. CO.

BUCYRUS, OHIO.

Builders of

Steam Shovels,

Steam Dredges,

WRECKING CARS.

**MONTAGUE & CO.**

MANUFACTURERS OF

* FIRE BRICK, *

Standard Sewer Pipe

AND CULVERT PIPE.

Double Strength, with Improved Sockets.

CHATTANOOGA, TENN.

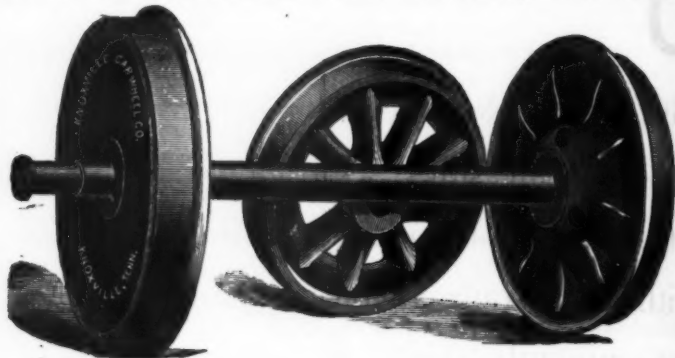
Knoxville Car Wheel Co.

—KNOXVILLE, TENN.—

Manufacturers of All Kinds of

CHILLED WHEELS

For Railroads, Street Railroad, Ore and Coal Mines, and Lumbermen.



Steam Hammers,

Steam Hoists,

Foundry Cupolas,

Derricks, Crabs,

Horse Powers,

Shieves, Drill Heads,

Gearing, Pulleys,

Bolts of all sizes.

Locomotives and Engines

Repaired and Indicated.

CORRESPONDENCE SOLICITED.

Steel and Iron Boilers,

Guild's Automatic

Boiler Cleaner,

Car and Locomotive Castings,

Soft Iron Castings of all kinds.

Heavy Castings a specialty.

Wheels mounted on Axles if

desired, with Oil Boxes

and Bolts.

MENTION THIS PAPER.

H. K. Porter & Co., Pittsburgh, Pa.

LIGHT LOCOMOTIVES, all gauges of track, for Passenger and Freight
Service, Logging Railroads, Mines, Blast Fur-
naces, Steel Mills, Coke Ovens, Contractor's Works, Plantations, &c.

NOISELESS STEAM MOTORS, all sizes and patterns, adapted to
Steep Grades and Sharp Curves,
and Noiseless and Smokeless. Cheaper, more Reliable and Efficient, and Less Objectionable than
Electric or Cable Systems.



THESE CUTS CHANGED EACH INSERTION.

ALL WORK STEEL FITTED and built to duplicate system. EXTRA PARTS kept in Stock.
MEMORANDUM.—LOCOMOTIVES AND MOTORS of several sizes, wide and narrow
gauge kept on hand for immediate shipment, or under construction for quick shipment.
Illustrated Catalogue, Photographs, Prices, &c., on application, mentioning this paper.

JOHN STEPHENSON COMPANY NEW YORKTRAMWAY CARS OF EVERY DESCRIPTION
LIGHT, ELEGANT, DURABLE**Railway Equipment, Pig Iron, Coal and Coke.**

AGENTS FOR

J. G. BRILL CAR CO.

NEW ALBANY RAIL MILL CO.

MINNIGERODE & ELLERBE, P.O. BOX 798 Birmingham, Ala.

TRADE NOTES.

THE Kincaid Manufacturing Co., Griffin, Ga., have contracted with the Crompton Loom Works, Worcester, Mass., for all the looms for their new mill.

LAKE CHAUTAUQUA.—Have you ever visited this delightful and cool resort? Easy of access. Low rates via Erie Railroad. Lookout for excursions. Write for illustrated pamphlet to W. C. Rinearson, Asst. G. P. A., Cleveland, O.

THE Petersburg Fire Brick Works, of Coal Grove, O., has the contract to furnish all the fire-brick to line the furnace and do other work for the furnace being built by the Attalla Furnace Co., at Attalla, Ala. The Petersburg Fire Brick Works make this kind of work a specialty.

THE Chalmers-Spence Co., of New York, whose asbestos goods, more especially their removable pipe and boiler coverings, are well-known throughout the United States, removed their Philadelphia offices on July 16 from 32-34 South 2d street to 24 Strawberry street, where their representative will be pleased to show their asbestos specialties and explain their merits to all interested parties.

We call attention to the advertisement of the Detroit Foundry Equipment Co., of Detroit, Mich. This is a large company with many patented and improved devices, such as overhead travelling cranes, etc. They contract to fully equip foundries in any part of the country with all the latest improved apparatus complete. They solicit correspondence from both old foundries and projected ones in the South.

EYMON & INGERSOLL, formerly known as W. A. Eymon & Co., manufacturers of milling machinery at Cleveland, O., will shortly begin the erection of a large new plant in East Cleveland for the manufacture of their line of milling machinery, and will add shapers, drilling machines, planers, and a fine line of special iron-working machinery to their line. The buildings will be completed about October 1, and will be a model in design and completeness.

THE Curtis Regulator Co., of Boston, report increasing foreign sales, among which within the last few weeks are two damper regulators in England and in Denmark; also in this country, 18 steam traps and 6 pressure regulators, 1 damper regulator of 300 horse-power for the Congaree Manufacturing Co., Columbia, S. C.; a 4-inch steam separator in New York; one 6-inch and 8-inch steam separator to the Tremont Nail Co., of Boston, and 144 steam and water regulators from 1 to 5 inches.

THE Laidlaw & Dunn Co., of Cincinnati, O., have lately issued a tastily executed souvenir card, calling attention to their exhibit at the Centennial Exposition of the Ohio Valley, which is now being held at Cincinnati, O. They have the following machinery on exhibition: The two 300 horse-power "Galloway" boilers in Washington Park Hall; the duplex pump-feeding "Galloway" boilers in Washington Park Hall; the duplex pump-running "Haven" elevator in Washington Park Hall; the two duplex pumps supplying grand waterfall in Horticultural Hall; the duplex pumps supplying grand fountain in Washington Park Hall; all the pipe, fittings and valves for steam, water and fire purposes; all the pipe and fittings for the gas displays in buildings and on streets; the grand electric light chandelier in Music Hall.

THE Maginnis Cotton Manufacturing Co., New Orleans, La., have placed their order with the Crompton Loom Works, Worcester, Mass., for the looms for their new mill.

THE Lathe & Morse Tool Co., manufacturers of machinists' tools, Worcester, Mass., report a fair Southern business, with a very good outlook. They have recently filled orders from Baltimore, Md.; Lincolnton, N. C., and New Orleans, La., and have orders unfilled from Henrietta, N. C., and Augusta, Ga. They also say their goods are in use in every State and Territory in the United States, and give universal satisfaction. Thomas K. Carey & Bros., No. 21 South Charles street, Baltimore, Md., represent them in the South, and carry a full line in their storehouse.

THE Michigan Wire & Iron Works, successors to E. T. Barnum Wire & Iron Works, of Detroit, Mich., have, by the addition of ample capital, large modern buildings and special machinery, secured one of the largest and most complete plants in their line of business in the country. Here can be seen the largest steam-power loom in the world for weaving wire cloth. It is the intention of the Michigan Wire & Iron Works to fully cover every branch of their trade to keep ahead of their competitors in the latest and most artistic designs at the lowest prices. A new and handsomely illustrated catalogue of 90 pages has just been issued, and the company is ready to fill orders. Correspondence solicited.

COMPARATIVELY few persons are aware of the many uses of mineral wool, and suppose it is principally used in packing or protecting steam pipes. It is now used on a very large scale to make buildings fire proof, to deaden sound and as a protection against frost. These and many other uses are carefully set forth in a neat little pamphlet published and sent free to any one upon application by the Western Mineral Wool Co., at Cleveland, Ohio, or St. Louis, Mo. If the reader has never seen a specimen of mineral wool, one will be sent with a copy of the little book, "The Uses of Mineral Wool," and will prove interesting reading. Mineral wool is used by railroad companies in the construction of cars, rendering them fire-proof, sound-proof, indestructible, frost-proof and odorless. It is also valuable for packing-houses, cold storage or refrigerating houses and breweries; in fact, any sort of building, particularly hospitals, asylums, schoolhouses, public halls, hotels, etc.

THE sales of Babcock & Wilcox boilers for the months of May and June, 1888, were as follows:

	Horse-power.
Edison Electric Illuminating Co., Paterson, N. J., 3d order.....	250
Planters' Sugar Refining Co., New Orleans, La. 240	
Girard Estate, Philadelphia, Pa., 4th order....	51
C. Bruin & Co., Milan, Italy.....	10
David Colville & Sons, Motherwell, near Glasgow, Scotland, 3d order.....	700
Mineral Railroad & Mining Co., Wilkesbarre, Pa., 2d order.....	240
McWhirter, Ferguson & Co., Glasgow, Scotland, 2d order.....	51
The Platt-Lane Mfg. Co., Limited, Hindley, England.....	124
Bureau Provisions & Clothing, Washington, D. C., 2d order.....	1,040
Imperial Continental Gas Association, for Vienna Opera House, Vienna, Austria, 2d order....	248
Mrs. R. S. Welham, Homestead Plantation, St. James Parish, La., 2d order.....	136
L. Stern & Co., Limited, London, England, 4th order.....	130
Edison Phonograph Works, Orange, N. J., 2d order.....	146
American Glucose Co., Buffalo, N. Y., 2d order, for Peoria.....	960
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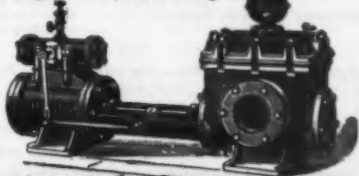
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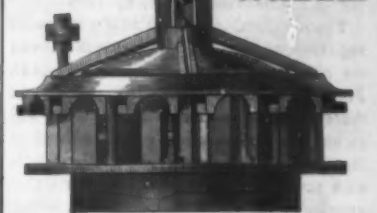
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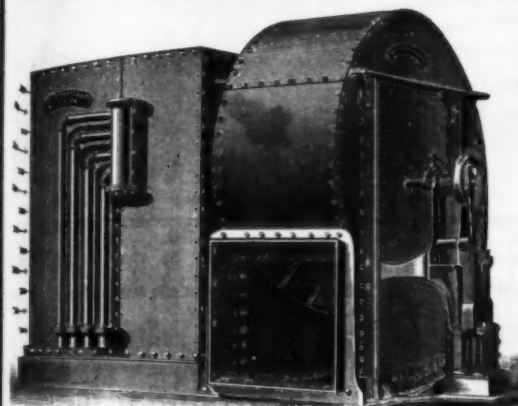
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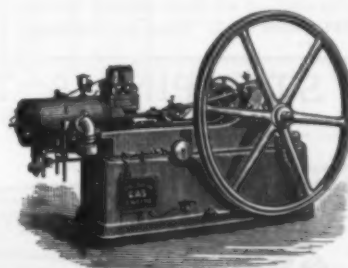
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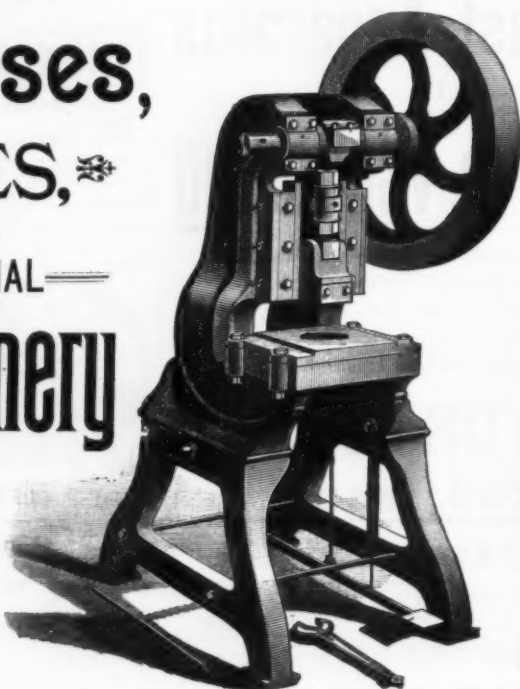
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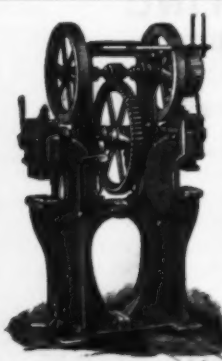
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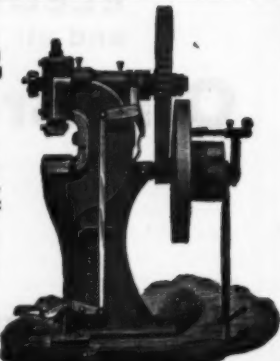
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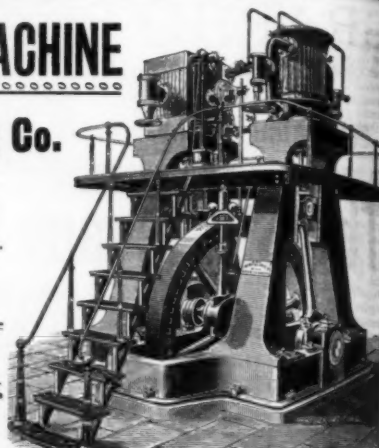
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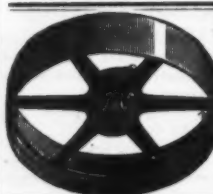
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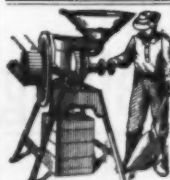
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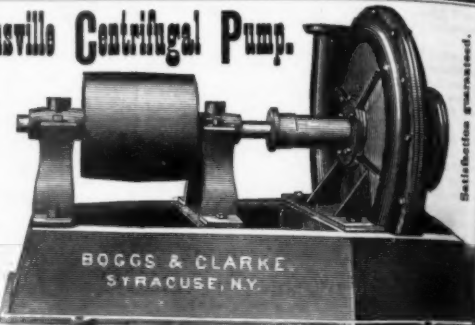
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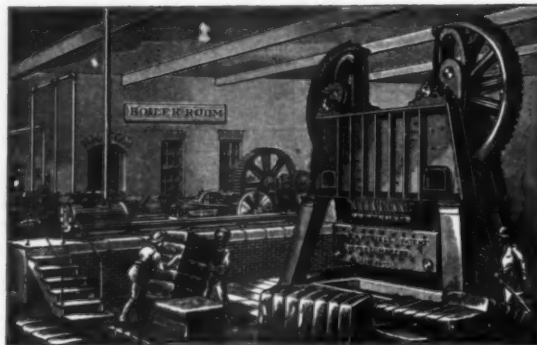
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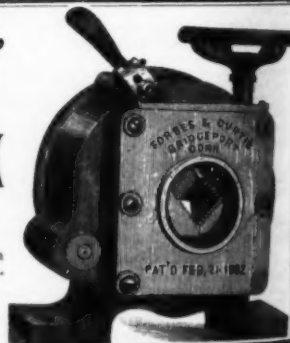
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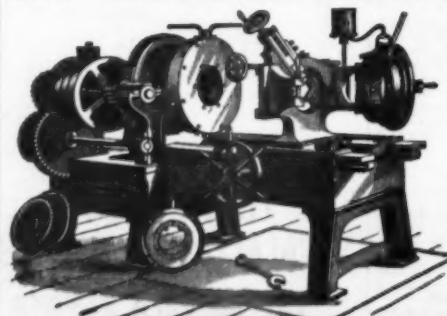
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Holmes, Booth & Hayden	dis 50x10	5
Wallace's Steel Silver Plated	dis 35	5
Rogers Bros 1847	dis 50x10	5
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Standard new list, Feb. 15.

Flat Head Bright	dis 70	5
Round Head Bright	dis 65	5
Flat Head Brass	dis 65	5
Round Head Brass	dis 60	5
Flat Head Blue (add 5¢ to net)	dis 70	5
Brass and Silver Capped	dis 40	5
Japanned Flat Head	dis 65	5
Coch, Patent Gimlet Point	dis 75	5
Coch, Common or Lag	dis 70	5
Bed	dis 65	5
Machine, Flat Head, Iron	dis 55	5
Machine, Round Head, Iron	dis 50	5
Beach, Iron	dis 50	5
Beach, Wood, Beach	dis 45	5
Beach, Wood, Hickory	dis 40	5
Hand, Wood	dis 40	5
Hand Rail, Sargent's	dis 40	5
Hand Rail, Humason, Beckley & Co.	dis 40	5
Hand Rail, Am. Screw Co., list Jan. 1, '85	dis 40	5
Jack (Wilson's)	dis 45	5

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Standard Window Screens No. 1	dis 50	5
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No. 1. Set for Window, dis 50.

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No. 1/4. " " dis 50.

No. 1/8. " " dis 50.

No. 3. " " dis 50.

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Boughton's Adjust. Window and Door Frames, dis 50.

Window screen frames (Stuart's), dis 50.

SHEARS AND SCISSORS.

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Pruning, see Pruning Hooks and Shears.

Bernard's Lamp Trimmers, dis 40.

Tinners', dis 50.

Massachusetts, dis 50.

Seymour's, dis 50.

Jersey Shears, dis 50.

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O. S. Co. Brand—

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Jap. Handles, Nickel Blade, dis 75x10.

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Sliding Door, R. & E. list, dis 40.

Sliding Door, Patent Roller, dis 40.

Sliding Door, Pt. Roller, Hark's, dis 40.

Sliding Door, Russell's Anti-Friction, dis 40.

Also see Hangers.

SHOVELS AND SPADES.

Ames, New List, November 1 1885, dis 50.

Griffiths, dis 50.

Remington's (Lowman's Patent), dis 50.

Rowland's, dis 50.

Lippincott, new list, dis 50.

Humy, Hins & Co., dis 50.

SILVER PLATED HOLLOW WARE.

Wm. Rogers Manf. Co., dis 50.

Meriden Britannia Co., dis 40.

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Covett's Adjustable Coppers, dis 35.

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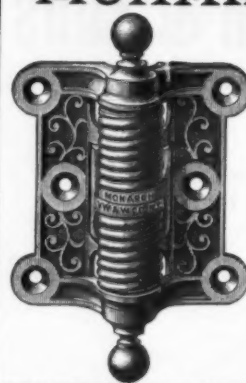
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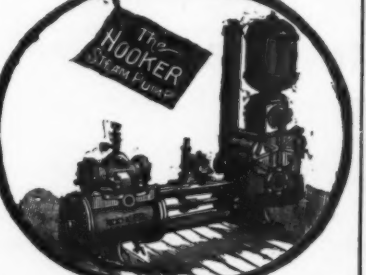
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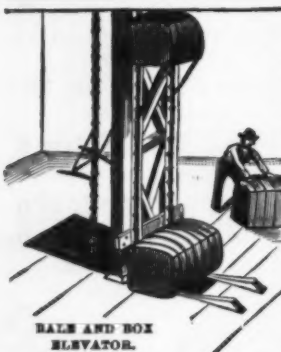
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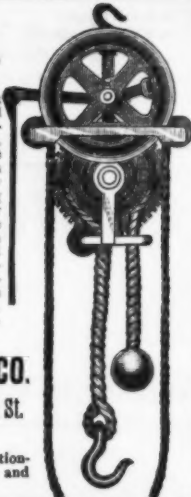


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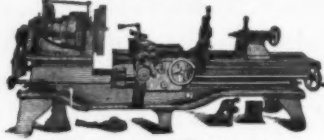
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Iron Working Machinery,

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Extension and Gap Lathes, Planers with Quick Return, Drills, &c., Hand Power Elevators with Patent Brake, Double Chain Screw Hoists, Overhead Tramway with Switch, Turntable and Geared Truck.
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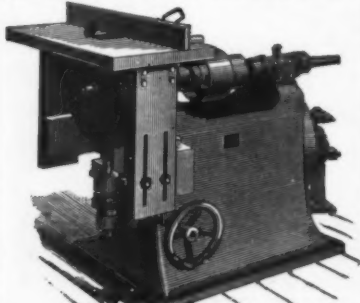
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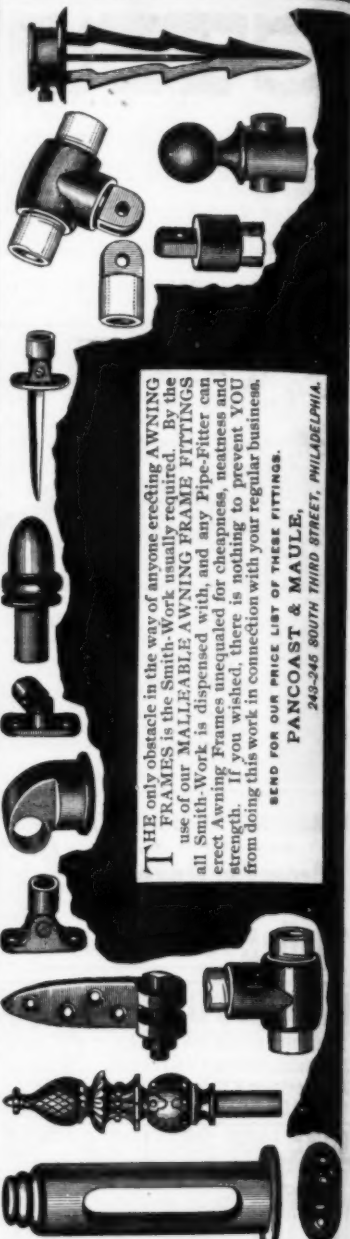


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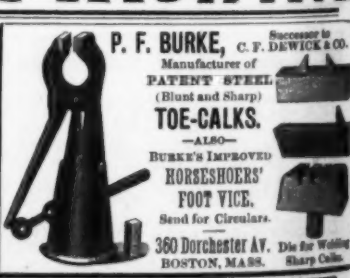
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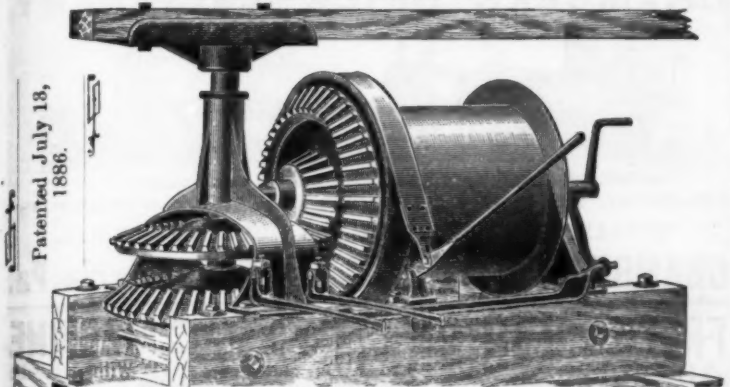


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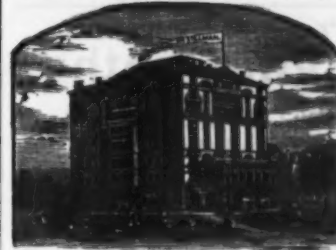
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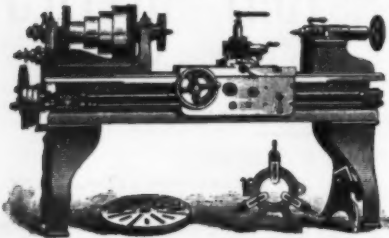
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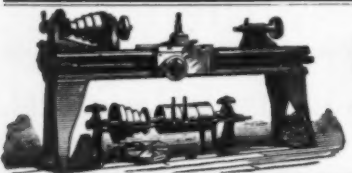
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These machines are made a
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Has no Pumps.

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TO OBTAIN DRY STEAM, USE THE

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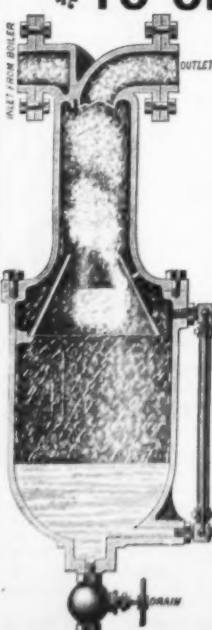
This is the only apparatus that automatically separates
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Over 20,000 Horse Power in Use.

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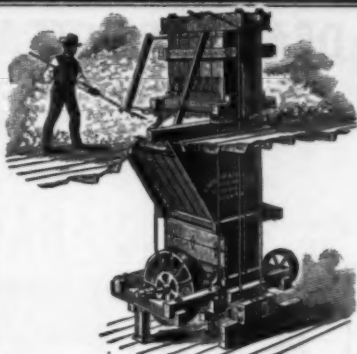
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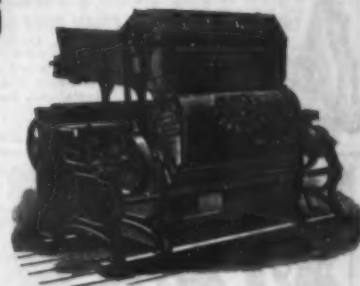
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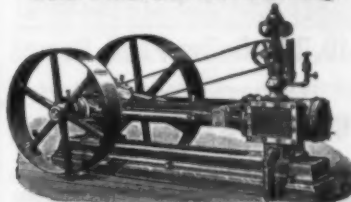
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Dispenses with tramping.

Simple, convenient, easy to handle and works to perfection



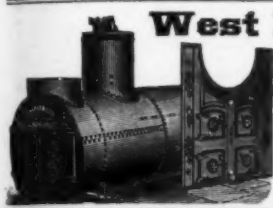
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FULL LINE OF STATIONARY, PORTABLE AND DETACHED ENGINES AND BOILERS.

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STEAM BOILERS OF ALL KINDS.

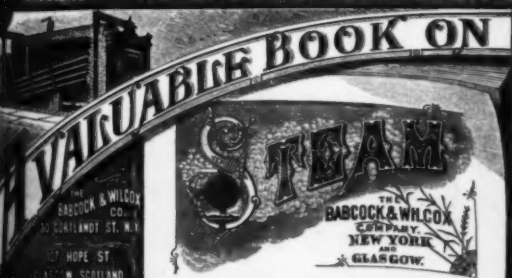
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ALL WORK GUARANTEED.

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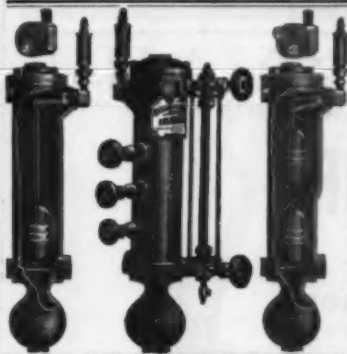
Horizontal, Vertical and Locomotive Boilers.

SMOKE STACKS, TANKS, HOUSE HEATERS,

Foundry Ladles, Sheet Iron Work, &c.

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Send for Catalogue. — WILMINGTON, DEL. —



The Reliance Safety WATER COLUMNS

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They obviate all damage resulting from too little and too much water, and would be a good investment at almost any price. EVERY COLUMN WARRANTED. Thousands in use. Send for Illustrated Price-List. Sold and warranted by Boiler Makers and Dealers everywhere.

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McLAUGHLIN'S IMPROVED ADJUSTABLE STEAM FLUE CLEANER.

IT NEVER FAILS.



Pat. Dec. 24, 1886.

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GEO. G. McLAUGHLIN MANUFACTURING CO.
137 Oliver Street. — Boston, Mass.

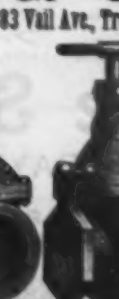
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Office and Works: 938 to 954 River St., and 67 to 83 Vail Ave., Troy, N.Y.

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Double and Single Gate, 1/4 inch to 48 inch; outside and inside Screw, Indicators, etc., for Gas, Water, Steam, Oil.

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Also Fire Hydrants, Yard and Wash Hydrants, Check and Foot Valves.



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For the reason that if you are interested in raising water or other liquids by steam power, we wish to call your attention to the
NEW PULSOMETER,
THE CHEAPEST AND BEST STEAM PUMP IN THE MARKET. PRICES LOWER THAN ANY OTHER.
More Efficient, Simple, Durable, and more Economical, both as to running expenses and repairs, than any other Steam Pump.
For Mining, Railroad use, Paper Mill, Chemical or Gas Works, Tannery, Brewery or Sugar Refineries, Draining Quarries, Cellars or Plantations, Irrigating or Hydraulic Mining.
Call or write for our new 56 page Illustrated Descriptive Book containing Full Particulars, Reduced Net Prices, and hundreds of A-1 Testimonials. Mailed Free.
Pulsometer Steam Pump Co., 120 Liberty St., N. Y.

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ACME PUMP SINGLE PUMP DUPLEX PUMP

VALLEY MACHINE CO. EASTHAMPTON, MASS

THE CANTON STEAM PUMP CO.
MANUFACTURERS OF
MILLER IMPROVED, DUPLEX, UNIQUE
AND TORRENT STEAM PUMPS.

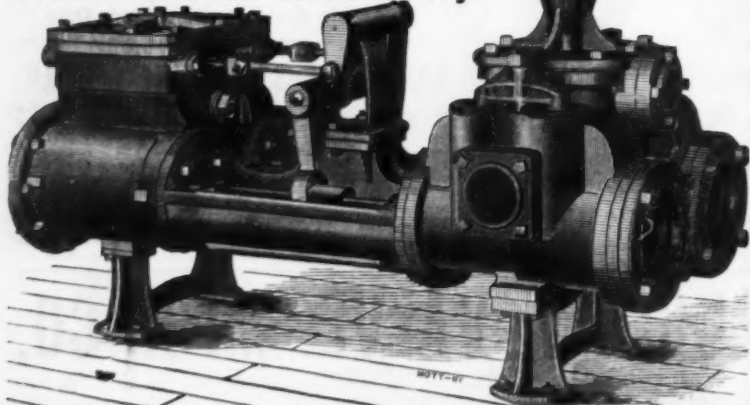
Over 10,000 Boiler Feed Pumps
—IN USE—
Every Pump Guaranteed. Send for Illustrated and Descriptive Catalogue.

FOR BOILER FEEDING AND GENERAL PUMPING PURPOSES.

The CANTON STEAM PUMP CO.
Canton, Ohio.

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—MANUFACTURERS OF—
Duplex STEAM Pumps
IN ALL SIZES,
And Adapted for Every Service.
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Large stock of small and medium Pumps constantly on hand for immediate delivery. Write for prices and discounts. Estimates for large or SPECIAL PUMPING MACHINERY furnished on application.

THE IMPROVED **SMITH & VAILE**
Single, Duplex and Compound
STEAM PUMPS
FOR EVERY DUTY.
Water-Works Machinery.



12½ in. Steam Cylinder, 20-in. Water Cylinder and 24 in. stroke Improved Low-Service Pump.

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PUMPING MACHINERY FOR ALL PURPOSES. **INDIANAPOLIS, IND.** SEND FOR CATALOGUE AND PRICES.

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+ FOR +
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SALEM, OHIO.

THE VOLKER & FELTHOUSEN MFG. CO.
MANUFACTURERS OF
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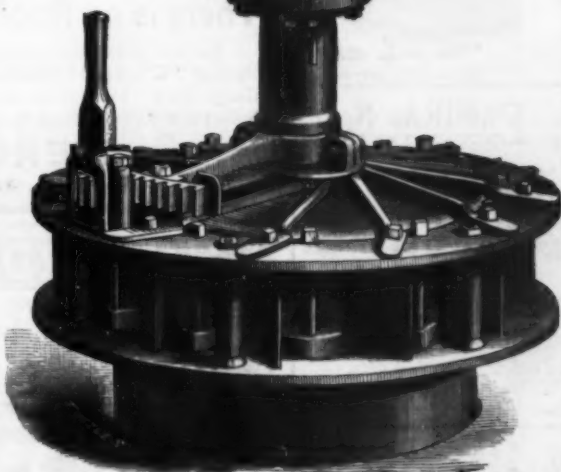
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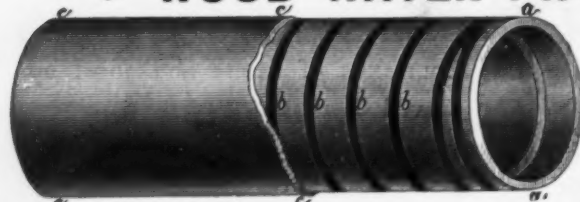
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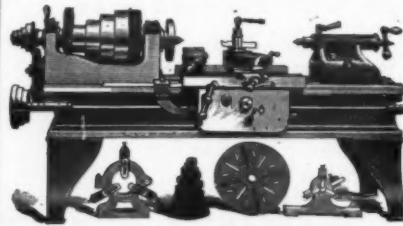
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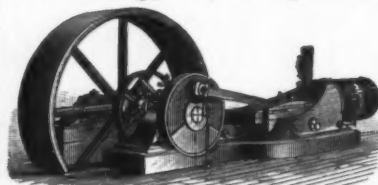
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